DEVOTED TO AGRICULTURE AND ITS KINDRED ARTS AND SCIENCES.

VOL. VI. BOSTON, JULY, 1854. NO. 7.

REYNOLDS & NOURSE, PROPRIETORS. OFFICE....QUINCY HALL. SIMON BROWN, EDITOR. FRED'K HOLBROOK, } ASSOCIATE HENRY F. FRENCH } EDITORS.

CALENDAR FOR JULY.

"Then came JULY, boiling like to fire,
That all his garments he had cast away;
Upon a lyon raging yet with ire
He boldly rode, and made him to obey:
* * * * * * *
Behind his backe a sithe, and by his side,
Under his belt, he bore a sickle circling wide."

N JULY, the great Hay Month, the principal portion of this important crop is gathered. There is something in the collecting of this delightful harvest which inspires animation and pleasant emotions in all. The mowers, the spreaders and the rakers, in their white shirts, make the landscape a most lively scene, while the sweet odors of the drying blossoms come to the senses upon every breath.

How the farm has *filled up*—what a fulness there is all about the homestead. The fences are half hidden in the spires of the ripening red-top, the heads of the herds-grass, and sweet blossoms of the red clover. How your neighbor's house is hidden from view by the thick foliage of the old apple trees, the stately ash and the drooping elm. Honeysuckles of varied hues and odors twine around the pillars of the piazza, or climb kindly over the lattice of the old porch to shut out the noontide sun. "The woods and groves have darkened into one impervious mass of sober uniform green, and having for awhile ceased to exercise the more active functions of the spring, are resting from their labors, in that state of 'wise passiveness' which *we*, in virtue of our infinitely greater wisdom, know so little how to enjoy."

How appropriately is every thing ordered! The heat is now greater than in any other month, just at the moment when it is most wanted to save one of our most important crops. But fervid as are the days, nature is still lavishing her favors, for besides the flowers of last month, there are now the candy tuft, the catch-fly, columbines, egg-plants, French marygold, marvel of Peru, and roses and lilies. So the woods and groves produce new flowers, and the roadsides are ornamented with the blue-bell and other gay blossoms to gladden the traveller's eye.

Before the month closes, the rye will be yellow and ready for the sickle. The "oats will whiten apace, and quiver, each individual grain on its light stem, as they hang like rain-drops in the air." The wheat and barley assume a dull green while their swelling ears bow before every breeze that blows over them. There is a beautiful adaptation of things to each other, and of particular things to the whole.

"The poetry of the earth is never dead;
When all the birds are faint with the hot sun,
And hide in cooling trees, a voice will run
From hedge to hedge about the new-mown mead;
That is the grasshopper's."

So all the lower orders of creation live their little life in joy, happy in the adaptation of their habits and wants to the condition of things about them. Some pour forth their melodies before the sun streaks the east in the early morning; some chirp and sing in the hot and fervid noon, and others utter their plaintive notes in the cool and sombre evening. The farm is full of profitable teachings to every reflecting mind.

Though late in starting, vegetation has had a rapid growth, and now the crops generally look well. Without much more rain, the grass crop will be, at least an average one, and so will the small grains, though rye, perhaps, may not be as heavy as for two or three years past.

Corn looks well—it has had a good color from the start. But *guano* and the *crows* have been unusually destructive upon it; much now will depend upon the heat of the season, and upon

HOEING.—Many persons continue to throw up hills about the corn, and even upon quite dry soils. This mode of cultivation may answer on low lands, but we cannot believe it a good one, on such land

as is generally used for the crop. Is it known whether the Indians hilled their corn before the English cultivated it among them? A proper hoeing of the corn must not be neglected, during the early part of haying. Keep the ground clear of weeds, and the surface in such fine tilth as to receive the greatest benefit from the sun, rain and dews.

HAYING.—Do not delay this work too long. By selecting a field here and there, or even a part of a field, that has come into fit condition to be cut, you will gain in the excellence of the fodder, far more than the loss will be of cutting in small parcels. Do not make the hay *too much*. In a bright, hot, July day, herds grass or red top, cut early in the morning, spread evenly and frequently stirred, can be made sufficiently in one day, to keep sweet and perfectly well through the winter. The juices are fairly burnt out of a great deal of hay, and it is carried to the barn so wiry and hard that the cattle eat the leaves and refuse the rest. A little salt may be added to hay with advantage.

HARVESTING GRAIN.—The cutting of wheat, barley, rye, and oats, is often delayed too long, and the loss arising from it is in several ways. By early cutting,

1. It will not fall out and be lost upon the ground.

2. The grain cut early will make more bread, and the color will be more delicate.

3. You prevent an unnecessary exhaustion of the soil—for after the stem reaches a certain state, if nutriment is gathered by it, it is not conveyed to the grain. And,

4. The straw will be altogether better, whether it is to be used for fodder or domestic purposes. Whenever the straw becomes dry its action upon the grain has probably ceased. But is it not too long to wait until the *whole* stem is dry? The stem is smallest directly under the head, and when that part is dead the crop may be harvested, and will produce the greatest weight of grain.

TURNIPS.—Where the peas, potatoes and other early crops have been taken off, put in ruta bagas, and later in the month the flat turnip.

CABBAGES.—Cabbages for late crops may be set.

MELONS, squashes, cucumbers, and all the garden plants, should be kept clean and carefully tended every way. It will not be too late to put in melons and cucumbers for pickles early in this month. Celery may be planted out in trenches.

SEEDS.—Collect all seeds as fast as they come to maturity.

LIME.—To receive the greatest benefit from lime, it must be kept as near the surface as possible. The reason is this: its weight and minuteness give it a tendency to sink; and after a few years of cultivation, a large portion of it will be found to have gone beyond the depth of its most efficient action. Hence it is advisable to spread it on the ground after plowing; then harrow it well in, and allow it to remain in grass as long as good crops can be had. When the lime is settled down below the reach of the common plow, the subsoil plow will prolong its effect, by enabling the atmosphere and the roots of plants to penetrate the subsoil likewise.

THE CHILD AND THE FLOWER.

"O, tell me, mother," said a fair young child,
As he gazed with his earnest eyes,
"Who made this flower? What painted it so?
What gave to it that deep rich glow,
Like the blue of the beautiful skies?"

"He who made that flower, my darling boy,
Who maketh the thunders roll;
He made the earth, the sky, the sea,
The flower, the fruit, the leaf, the tree,
And gave to thee thy soul.

"Is His home, dear mother, that southern land,
Where the perfumed breezes play—
Where the gorgeous birds, with golden wing,
Make bright the never changing spring
In bowers that are ever gay?"

"His home, my child, is beyond the skies,
A paradise of flowers,
Where little children—angels there—
Paint those flowers so bright and fair,
And bring them to this land of ours."

"O, how I wish that home were mine,
And you were with me too;
I would paint a wreath so strangely fair
And twine it, mother, for you to wear—
A crown of heaven's own hue!"

BUTTER.

Not one pound in five of the butter sold in the market is fit for human food. Buttermakers should remember these few short rules:

The newer and sweeter the cream, the sweeter and higher flavored will be the butter.

The air must be fresh and pure in the room or cellar where the milk is set.

The cream should not remain on the milk over thirty-six hours.

Keep the cream in tin pails, or stone pots, into which put a spoonful of salt at the beginning, then stir the cream lightly each morning and evening: this will prevent it from moulding or souring.

Churn as often as once a week, and as much oftener as circumstances will permit.

Upon churning, add the cream upon all the milk in the dairy.

Use nearly an ounce of salt to a pound of butter.

Work the butter over twice, to free it from the buttermilk and brine, before lumping and packing.

Be sure that it is entirely free from every particle of buttermilk, or coagulated milk, and it will keep sweet as long as desired.

In Scotland, a syphon is sometimes used to separate the milk from the cream, instead of skimming the pans.

HOEING.

As the season for planting and hoeing is at hand, a few words upon those subjects may not be deemed out of place.

So far as the hoeing of corn is concerned correct ideas and practices have been generally adopted within the past ten years, and we now see in a cornfield, any other than a flat hill, if any hill at all; but with all other hoed crops, such as beans, hops and early potatoes, so far as my observation extends same high conical hills are still made them as were made thirty or forty years Now I readily admit that there may be when such shaped hills may be beneficial ful, such for instance as in low, clayey soil to overflow in heavy showers (though seldom planted,) but the trouble lies in ing these exceptions, and we therefore farmers who still adhere to the old practice high hilling, do so to all their different crops and on all kinds of soils. This I believe be a great mistake, and those who have discued the practice with their corn, believe they rive great advantages from the change, especially in dry seasons, obtaining much larger crops and leaving the fields in much better condition for plowing the coming spring, saving the labor of splitting the hills, as it is termed.

Seeing now the advantage to corn, of not hilling, why should not the intelligent farmers push their investigations a step farther and inquire if the same practice cannot be extended to the potato. But I anticipate in the outset that an objection may be raised in the case of the potatoes, and that it may be urged that it is positively necessary that it should be earthed up in order that room be furnished for the tubers to form; but what evidence have we of this? So when the subject of not hilling corn was first agitated, it was urged that it was necessary in order that new sets of roots might be formed to brace up the plant when it attained its full height, and prevent its blowing over, but upon trial and investigation it was discovered that these roots were merely the result of hilling up, and farther, that corn not thus hilled up and thus supported by new roots, stood equally as well the assaults of wind and storm, and the practice of high hilling was discarded as eminently injurious by shedding off the rains from the roots and exposing a much larger surface to the sun's rays for evaporation during the heats of summer.

Now might it not prove upon investigation that the potato might do equally as well, and even better, without any hilling at all? In the discussions upon the subject of hilling corn, it was with much pertinency asked, if *nature* had not provided a way to support a stalk of corn against an attack of wind, without recourse to art, and may it not be asked with as much pertinacity, if nature has not provided a way to produce the tuber of the potato plant without recourse to an artificial hill or mound around the plant? But I am aware that it may be still further urged, that in earthing up potatoes you give them more room and a greater chance for expansion, and thus increase their size; but to this I would say, just plow your ground deep and well, pulverize your soil, and your potato will find ample room to expand between the hills and rows, and by keeping the ground level, you will be saved the mortification of beholding them wilt and wither in time of drought. But again it may be urged that as upon the examination of the potato root and stalk, it is found there are numerous offshoots of roots above the original, evidently produced by hilling up, therefore the amount of roots are increased and consequently the tubers. To this I would answer, that it is by no means certain that the original or lower roots would not have produced as many tubers, and *larger ones*, if left to the evident course of nature. What would be the most natural inference to draw from the fact, that after the potato plant is fairly up and its roots well developed, it is earthed up and its first roots laid below the benign influence of light and air? Would it not be, that it would tax the energies of the plant, to again produce and throw out a new series of roots, and thus lessen the supply of nourishment to the original ones? It certainly so seems to me, and it is perfectly evident to my mind that the true course to pursue in raising potatoes is, to spread the manure upon the surface and turn it well under with the plow, and then furrow for the crop from three to four inches deep; drop the seed in the bottom of the furrow with a little ashes and plaster; cover two inches; run the cultivator between the rows in hoeing, and finish the cultivation with leaving the ground perfectly level. This course in all ordinary seasons would insure the crop against drought, and except in very wet ground (which by the way should never be planted with the potato during the prevalence of the rot,) would, I believe, insure a greater crop than with the present practice of hilling.

The practice of making high hills I believe is still kept up in the cultivation of hops, and to this may we not attribute the short crops that occur occasionally, as they are more generally raised on light loam or sandy soils? I think the subject should attract attention, and experiments should be instituted to test the weather.

Milford, May 20, 1854. H. A. DANIELS.

Farmer and Visitor.

For the New England Farmer.

CHEAP EXPERIMENT IN DECOMPOSING BONES.

In the Monthly *Farmer* for April, page 186, there appeared an article from the pen of JAMES RICHARDSON, Jr., under the above caption. After speaking of the former waste of bones and of their being at last brought into use as an article of manure, and the difficulty attending their decomposition, by being ground or dissolved in sulphuric acid, he adds, "without alluding to other experiments, in regard to dissolving bones in *strong lye*, &c.—that have been *partially successful*, I purpose here, in as few words as possible, to describe an experiment made on a small scale, with bones and horse manure, that may lead the reader to still further experiments, and at length end in some practical result." He then goes on to describe the experiment, informing us that it was made by a soap manufacturer.

As to the experiment of decomposing or reducing bones to a powder by boiling in "strong lye," I know that it will do the job in a few hours, for I have done it. The time occupied was about four hours, stirring occasionally. I am now try-

ing an experiment of decomposing them in lye without boiling, and you shall know the result.

It seems that Mr. Willis, the conductor of the experiment alluded to, is a "soap manufacturer," so that without doubt the bones he used had been boiled in "strong lye" sufficiently to deprive them of all their animal matter, thereby rendering them so brittle that they might have been pounded up without much difficulty. Hence "strong lye" had much to do with their decomposition. Gypsum should be mixed with bones and lye, to retain the ammonia, if the bones are fresh. S. TENNEY.

HABITS OF INSECTS.

Small as the subject may appear to persons whose minds have not been turned in that direction, the study of insect life and of the habits and character of the numerous varieties and families of insects which infest our fruit trees, farms, and gardens, is intensely interesting, and when once entered upon, leads to a kind of knowledge which may be turned to practical account in the management of the farm or garden.

The insects injurious to vegetation are some of them so destructive in their habits as to be a great pest to the farmer. To guard against their ravages and prevent the serious injury if not the total destruction of our crops, requires in some instances a full knowledge of the habits and of the laws of insect life, a knowledge which very few farmers possess.

A few men in this country have directed their attention to these subjects, and have given to the world the benefit of their researches. Prominent among these is Dr. Harris, of Massachusetts, whose book is regarded as a standard work upon insects, a work from which a vast amount of practical information may be gained.

To show the intimate knowledge which may be acquired of the habits of the insects which infest our orchards and gardens, we copy from Dr. Harris's work the following account of the Aphis or plant lice, and of the intimacy subsisting between them and the ant.—*New York Farmer.*

"The genus to which plant lice belong is called *aphis*, from a Greek word which signifies to exhaust. The following are the principal characteristics by which they may be distinguished from other insects. Their bodies are short, oval, and soft, and are furnished at the hinder extremity with two little tubes, knobs, or pores, from which exude almost constantly minute drops of a fluid as sweet as honey; their heads are small, their beaks are very long and tubular, their eyes are gobular, but they have not eyelets, their antennæ are long and usually taper toward the extremity, and their legs are also very long and slender, and there are only two joints to their feet. Their upper are nearly twice as large as the lower wings, are longer than the body, are gradually widened toward the extremity, and are nearly triangular; they are almost vertical when at rest, and cover the body above like a very sharp-ridged roof.

* * * * * *

"Plant lice seem to love society, and often herd together in dense masses, each one remaining fixed to the plant by means of its long tubular beak; and they rarely change their places till they have exhausted the part first attacked. The attitudes and manners of these little creatures are exceedingly amusing. When disturbed, like restive horses, they begin to kick and sprawl in a most ludicrous manner. They may be seen, at times, suspended by their beaks alone, and throwing up their legs as if in a high frolic, but too much engaged in sucking, to withdraw their beaks. As they take in great quantities of sap, they would soon become gorged if they did not get rid of the superabundant fluid through the two little tubes or pores at the extremity of their bodies. When one of them gets running over full, it seems to communicate its uneasy sensations, by a kind of animal magnetism to the whole flock, upon which they all, with one accord, jerk upward their bodies, and eject a shower of the honeyed fluid. The leaves and bark of plants much infested by these insects are often completely sprinkled over with drops of this sticky fluid, which, on drying, becomes dark-colored, and greatly disfigure the plant. This appearance has been denominated honey-dew; but there is another somewhat similar production observable on plants, after very dry weather, which has received the same name and consists of an extravasation or oozing of the sap from the leaves. We are often apprised of the presence of plant lice on plants growing in the open air, by the ants ascending and descending the stem. By observing the motions of the latter, we soon ascertain that the sweet fluid discharged by the lice is the object of these visits. The stems swarm with slim and hungry ants running upward, and others lazily descending with their bellies filled almost to bursting. When arrived in the immediate vicinity of the plant lice, they greedily wipe up the sweet fluid which has distilled from them, and when this fails, they station themselves among the lice and catch the drops as they fall. The lice do not seem the least annoyed by the ants, but live on the best possible terms with them; and, on the other hand, the ants, though unsparing of other insects weaker than themselves, upon which they frequently prey, treat the plant lice with the utmost gentleness, caressing them with their antennæ, and apparently inviting them to give out the fluid by patting their sides. Nor are the lice inattentive to these solicitations, when in a state to gratify the ants, for whose sake they not only seem to shorten the periods of the discharge, but actually yield the fluid when thus pressed. A single louse has been known to give it drop by drop successively to a number of ants that were waiting anxiously to receive it. When the plant lice cast their skins, the ants instantly remove the latter, nor will they allow any dirt or rubbish to remain on or about them. They even protect them from their enemies, and run about them in the hot sunshine to drive away the little ichneumon flies that are forever hovering near to deposit their eggs in their bodies."

HOW THE WORLD WAS MADE.—If you want to know how the world was made, look into a basin of dirty water—your wash bowl for example. See the thin particles of matter gradually come together by mutual attraction, and then hang suspended in the watery element, or sink to the bottom. Each particle is instinct with a sort of life or force, which impels it to seek out some

other substance, and by continual accretion thus build up a little world of matter. This as soon as the aqueous fluid disappears becomes dry land or earth, and afterwards undergoes various igneous changes. How this matter originated is another thing a long way antecedent to its formation into existing shapes. Many of the ancients held it to be eternal; but the first verse of Genesis settles that matter, and informs us that it was God who created it. This probably is the sum of all we shall ever know upon the subject.—*Maine Farmer.*

HAY AND HAY-MAKING.

Dr. HOLMES, of the *Maine Farmer*, very truly remarks in relation to this subject, that

"The grass crop is one of the most important, if not *the* most important of all to the farmer, and the making or curing the grass is an operation upon which turns, after all, much of the value of the crop. A short growth, if well prepared, is more valuable than an abundant one spoiled by an improper management in making."

The hay crop may well be considered as one of great importance to the agriculturist, being one of the principal products of the farm, and the one on which he relies for the sustenance of his live stock during winter, and a considerable portion of the fall and spring.

Yet while all concur in regarding this crop as of prime consequence, there are but very few, comparatively speaking, who adopt the same modes of cutting and preserving it. We know, indeed, of no subject embraced in the routine of agricultural engrossments, on which there is extant a greater discrepancy of opinion and practice. It is important that some general system should be adopted as well in the management of this crop as in that of grain, at least so far as regards the time and manner of cutting and securing the product. A late writer, in some judicious reflections upon the importance of this crop, and the modes of curing it says:—"That mode which will secure as much of the natural juices as possible, and in the cheapest practicable manner, is the one I have endeavored to attain. Counting nothing for board and team, we do not pay out $1,00 per acre for cutting and securing our hay, at an average of one and a half tons per acre. In this section of the country the lands are principally of clay, and are quite free from stones. We lose ten times more out of hay by cutting too late than too early. Many let their clover and herds-grass stand till the seeds are ripe, and of consequence the stems become hard and wiry; a good share of the leaves have changed to a brownish state, and the natural sap has left the plant."

In cutting most, perhaps all kinds of grass, we think that the proper period is that, when the whole system having attained its maximum development, the flowers have unfolded, and when there is a large flow of rich and saccharine juice in the stalks and leaves. Some species of grass, it is true, increase somewhat in bulk after inflorescence, but with the majority of plants used for hay, the development of the flower indicates, with sufficient accuracy, the attainment of their *maximum* excellence, and the time when they may perhaps be most economically cut. The article above quoted says:—

"To get at the most proper time for cutting, let us inquire what rule the gatherer of herbs adopts in filling his medicine chest, or the distiller his plants. In collecting herbs and plants, they cut them as soon as they come into flower. At this period they contain all their useful qualities, and by cutting at this period they secure the greatest quantity of oil; but herbs that are cut at this period and dried in the sun, lose much more of their invigorating and essential qualities than they do if dried in the shade. Plants of all sorts, if they are cut in full vigor, and afterward carefully dried, without any waste of their natural juices, either by bleaching with rain or evaporating in the sun, contain a quantity of nourishing matter nearly double what they do when allowed to attain their full growth and make some progress toward decay. When mowing is delayed, as it very frequently is, till an advanced period of the season, when plants have not only reached their ultimate growth, but begin to decay, this description of herbage must become tasteless, dry, tough, and less nourishing. Also over care in drying in the hot sun, by bleaching the juices of the early grasses, must produce a similar kind of fodder."

In curing clover hay, the principal value of which consists in the heads and foliage, we have observed, that when cut early and cured in "grass cock," as it is called, the hay possessed a much more brilliant and beautiful appearance than the same quality of grass, cut at the same time, and cured in the open air, or under a free exposure often for a protracted period to the sun. By cutting this grass when the crop is in full blossom, allowing it to remain in the swath the first day after mowing, till nearly night, and then turning it carefully with a fork so as to expose a fresh and unwilted surface to the night dews, and cocking it in the afternoon of the second day, in small compact cocks, of about eighty pounds unmade hay, to the cock, it will make evenly and thoroughly, and may be pitched and even trodden down in mow without being deprived of its heads or finer leaves. The color will be a most beautiful green, and the flowers will be almost as fresh in color as when cut. After cocking, let the weather be fair or foul, no opening or turning, (unless in case of a protracted storm) of the "grass cocks" should be allowed. It is unnecessary, as the hay will "*cure*" completely through, and the outside, when saturated with water, will soon dry off, and effect no harm whatever to the hay. You will never see mouldy hay, if this method is adopted, in "making" or curing it. In forming grass cocks, the fork is preferable to the rake, which is of service only in gathering up the scatterings, and regulating the size and shape of the cocks.

For the New England Farmer.

MONTHLY FARMER FOR JUNE.

It is so difficult for me to find time even to jot down a few thoughts suggested by reading the *Farmer*, that I often wonder how others have leisure to write as much as they do. But the fact is, I suppose, that "Many hands make light work." Here in the number for the busy month of June, is a larger list of original communications than is usual for the more leisure seasons; and, as will be seen, a very wide variety of subjects are discussed, in a brief, pithy, farmer-like style.

ORIGINAL COMMUNICATIONS—*only*.

H. P., (N. Y.)	Small Potatoes for Seed—Wheat.
S. P. F., (Ms.)	History of Birds of New England.
S. Tenny, (Me.)	Hen Manure.
N. P. Morrison, (Ms.)	Best Apples to Raise.
J. N. Bagge, (Ms.)	Biography of a Gardener.
E. J., (N. H.)	Seeding with Barley.
S. P., (Ms.)	Plows and Plowing.
John M. Tyler, (N. H.)	Milch Cows.
D. C., (Ms.)	Farming in New England.
Ira Goodhue, (Vt.)	Making Maple Sugar.
A Reader, (Ms.)	Monthly Farmer for April.
A. Brown, (Ms.)	Great Yield of Butter.
G. P. N., (Vt.)	Green Corn for Cows.
Geo. B. Greene, (Vt.)	Yellow Locust Trees.
E. D. B., (R. I.)	Good Beef.
——, (Ms.)	Extravagant Prices for Stock.
T. A. S., (Ms.)	Seeding Land for Grass.
*, (Ms.)	Experiments.
M., (Ms.)	Cooked and Uncooked Food.
R. B. H., (Md.)	Great oxen, cows, sheep, pigs and
J. S., (Ms.)	Flowers and Birds. [Women.
H. B., (N. H.)	The Season—Frozen Trees.
H. Stratton, Jr., (Ct.)	Manures.
F. A., (Ms.)	Breaking Steers.
Essex, (Ms.)	Middlesex Agricultural Society.
B., (Ms.)	Shall I engage in Farming?
D. A., (Ms.)	Why do cattle eat Horse Manure?
Henry F. French, (N. H.)	A Lesson on Guano.
S. & T. S. Fletcher, (Vt.)	Account of their Farm.
R. M. Copeland, (Ms.)	Flower Garden.
W. Pierce, (Can.)	High Price of Beef.
Agricola, (Ms.)	Profits of Farming.
———	Fertilizers.
S. Tenny, (Me.)	The Season.
Mrs. S. Pierce, (Vt.)	Mixing Butter.
A Reader, (Ms.)	Monthly Farmer for May.
Seven or eight others	Make inquiries and suggestions,

Which, by the way, with the replies of the Editor, are usually among the most instructive portion of the whole paper.

Here then we have almost as many different writers as there are pages in the Farmer, without taking into the account the usual variety of Editorial and Selected articles. To me, this is a most encouraging feature of the times, as well as of the *Farmer*. To those who believe that the facts which are to constitute an American System of Scientific Agriculture, are to come *up* from the broad fields of Practice, the labors of these correspondents, who are experimenting, observing, inquiring, in all parts of our diversified country, have a value and importance much greater than they can have with those who believe that these facts are to come *down* from Colleges, State Farms, or Chemical Laboratories. These working, thinking, men,—stationed on our hills and in our valleys, on the sandy plain and on the cloddy clay, on the worn-out soils of the East and on the new soils of the West; operating in almost every climate, from a tropical to a polar one, and engaged on productions as diversified as their circumstances are various,—even if they are not actually building up a "Science," certainly are doing much to make agricultural publications valuable, by their interchange of experience, practice and results, however simple each one's record may appear to himself. Send on your communications then,—give us your failures as well as your triumphs; your disappointments as well as successes—there is room for them all in the columns of the *Farmer*. Here you speak, first, to a multitude of "Weekly" readers of a newspaper, and then neatly done up in book-form, "lettered and gilded," your productions appear on the shelves of agricultural libraries, throughout the country, to instruct and amuse generations yet unborn, as well as the men of your own time.

The foregoing list of original contributors, however, comprise only about one-half of the whole number of articles which make up this number of the Monthly *Farmer*. Among the more striking of which, are the pictures of farmer Slack and farmer Thrift; pictures too true for mere fun, for who has not seen the original of Farmer Slack! But it is not my intention to give even an index of the contents of this number.

I have a word or two for "B.," who asks, apparently in good faith, "*Shall I engage in Farming?*" This depends, my good sir, on *yourself*. If you wish for our advice, please stand out, so that we may have a look at you. Are your shoulders broad and your back strong, or do you pride yourself on small gloves and narrow boots? Can you stand heat like a salamander and cold like a seal, or must you carry an umbrella in dog-days and a foot-stove in Winter? Are your sinews hardened by out-door labor, or enervated by in-door confinement? Did you earn your "eight hundred dollars" by hard knocks, or did it "fall" to you? Can you work fifteen hours a day in hay-time, or are you President of a ten-hour convention? Are you willing to eat and use the poorest, so as to sell the best, or must you be served first in all good things? Have you learned the trade of farming, or do you think it comes by nature and cattle-show addresses? And, lastly, how is it with your "woman?" Will she, like the one described on page 259 of this month's *Farmer*, be

> "Up in the early morning; just at the peep of day,
> Straining the milk in the dairy, turning the cows away,
> Feeding the geese and turkeys, making the pumpkin pies,
> Jogging the little one's cradle, driving away the flies?"

or would a loose cow frighten her out of her wits, and a pail of water be too much for her strength? Does she glory rather in spending five dollars, than in saving five cents? Answer these question satisfactorily to yourself, before you take any body's advice to "engage in farming," or you may find the acclimating process rather severe for your nerves. Mr. French gives us a capital article, headed "*Stick to the Farm*,"—an article that ought to be put in a frame and hung up in every farm-house in the country,—but there is a great difference between advising to "Stick to the Farm," and recommending every agricultural dreamer to "engage in farming," without regard to his fitness for the business. The farm is a capital nursery of men for other professions in life, but your villages and city boys and girls are poor sprouts to put out on the farm—sort of hot-bed plants, that cannot stand the rough influences of out-door life. When merchants, mechanics or professional men, or their sons, conclude to turn farmers, I advise them to try the business at first, as apprentices or "hired men;" if they find they have stamina enough to work out the whole season, and shrewdness enough to lay up a hundred dollars a year

from their wages, then they may reasonably think of setting-up for themselves; and it will matter little what part of Massachusetts, or of the Union, they locate in,—such farmers prosper everywhere.

A READER.

Winchester, June, 1854.

SCRAPING AND WASHING TREES.

We have read the whole report alluded to below, and believe it well calculated to arrest some of the outrages against nature, so common, particularly in cities. Mr. COPELAND is an enthusiast in his profession, but his "zeal *is* according to knowledge," and we look for many a reform to take place through his instrumentality. We wish we could spare room for the whole report, but as we cannot, the condensing pen of Professor NASH, of the *Conn. Valley Farmer*, will give the reader its general outlines.

The Massachusetts Horticultural Society has published a report made to it by a committee appointed to inquire into "the uses and abuses of the practice of scraping and washing trees." The conclusions arrived at are so diametrically opposed to the prevalent opinion and practice, and seem at the same time so well supported by arguments, that we need no apology for publishing the resolutions in which those conclusions are contained, though we do not endorse everything contained in the report.

The resolves referred to are as follows:

"That, whereas it is a common custom to scrape off the outside bark of fruit and ornamental trees, and wash and plaster them with lime and other preparations, in the hope of benefiting the trees by the destruction of parasites and insects injurious to vegetation, and of improving their general appearance, the Massachusetts Horticultural Society do hereby resolve, for reasons which have been stated, that we consider this practice of no benefit to the tree, from its inability to affect the majority of the insects which are really injurious; and unnecessary in the case of lichens and mosses, they being not the cause but the consequence of disease and decay, and a positive violation of the laws of vegetable physiology, and consequently an injury to all trees, (but to ornamental ones in particular,) to an incalculable amount.

2d. That lichens and mosses, in a healthy state of the tree, are, so far as can be ascertained no injury to the bark, but from their varied colors, form one of its chiefest ornaments. Any operations for their removal are to be scrupulously avoided and reprehended.

3d. That as strict inquiry has shown that bark lice, woolly aphis, and some borers, do lay their eggs and hatch their young upon the bark of apples, pears, peaches and maples near the ground, and in the forks of the branches, a gentle rubbing with some pliable but stiff wire or other brush on the parts affected, to be followed by a washing with weak, soap, or whale oil soap, suds, is desirable, and will be of benefit when a careful examination shall have shown that the eggs are deposited upon any tree in question, but that this process is unnecessary and uneconomical when the presence of the enemy has not been most clearly proved."

The other resolutions are to the same effect, one of them being directed against all alkaline preparations plastered on to trees.

These conclusions are endorsed by Geo. B. Emerson, the learned author of the Trees of Massachusetts, and by Mr. Tuckerman, who has made the subject of lichens his particular study. They are, moreover supported by many arguments, drawn from practice, experiment, theory and analogy, but we have not space to enter upon these.

The report is drawn up by R. Morris Copeland, a gentleman who has adopted the occupation of a landscape gardener, which we take to mean the tasteful arrangement of grounds. At any rate, we observe that he has been employed to lay out the grounds around the new Insane asylum at Taunton, and the Reform School at Westboro'. We should have said that this profession was not as yet likely to thrive in this country. If it does so we shall be only too glad, as it will indicate an increased culture of taste, a quality which unfortunately is by no means so often displayed in this country as could be desired. Very many appreciate a tasteful thing when they see it, but very few can make anything tasteful themselves. This is especially true in ornamental gardening, where ornament is too often only another name for caprice and absurdity. Mr. Copeland seems to us to be starting in the right way, for in his report he protests most strenuously against torturing nature, urging on the other hand that she be followed and imitated.—*Conn. Valley Farmer.*

For the New England Farmer.

MEADOW MUD AND LIME.

MR. EDITOR:—I have an inexhaustible bed of muck on my farm, which I have used more or less in the raw state for some time, and have not received much benefit from it, excepting what has been carried into the yard or stable. As near as I can describe it, it is "decayed vegetation." Now what I want to know is this, can I by mixing lime with it, make a compost that will produce a crop of corn, rye, oats, or grass, without the aid of other manures? (*a.*)

The land which I wish to use it on, is yellow loam and slate stone soil. How much lime to the load, and how much muck to the acre.

Thetford, Vt., 1854. YOUNG FARMER.

REMARKS.—(*a.*) There is more difficulty in answering the above query, than the inquirer is probably aware of. The "yellow loam and slate stone soil," may be highly calcareous, or it may abound in alkalies, and must be treated as one or the other prevails. If effervescence takes place freely upon the application of acids to some of the soil, it is a calcareous loam, and the lime would scarcely be necessary. But if there were no effervescence, the compost of muck and lime would be valuable. But it is at least doubtful, whether such a dressing upon your fields would give them much permanence of fertility.

Suppose you experiment upon one acre. Upon one quarter put 12 loads, of 30 bushels each, of muck, and 12 bushels of lime. On another quarter, add the same amount of muck, and omit the

lime. On the third quarter, the same muck and 12 bushels of unleached ashes, and on the fourth quarter not anything, and let us know the result.

SINCLAIR, in his *Code of Agriculture*, classifies loams into four sorts: 1. Sandy; 2. Gravelly; 3. Clayey; and 4. Peaty; but if decomposed slate contains a considerable portion of lime, and much of the remaing portions of the soil are evidently of vegetable origin, we do not see why the term "calcareous loam" should not be used as well as "sandy," "gravelly," or "clayey" loam.

For the New England Farmer.

"A HORSE'S FOOT"—AGAIN.

MESSRS. EDITORS:—I was struck with the wonderful mechanism of the horse's foot, so minutely described in your last issue. No one, of the most common observation could read it without being instructed, yet this *same foot*, so necessary to the wants of man, is the careless concern of many.

Now with your permission, I will give you my *own experience* in this matter. I purchased a mare, originally *sound*. Her feet became tender; she had a colt. At three years old, her feet became tender also. The question arose, did the colt inherit tender feet? Is disease entailed with the brute creation? I found it for my interest to sell the animals. It was painful to drive them on a hard road. I then purchased a powerful mare, with great action. In a few months she began to cripple, and showed stiffness in the limbs. I investigated and sought the cause. She stood on the same *soft bed* occupied by her predecessor, which was the same with the colt. This was her manure, &c., with straw litter thrown in daily to keep her *clean*. It was suffered to remain till 2½ feet deep, then pitched out. It was found to contain *great heat* and *strongly impregnated with ammonia*. The hoofs stood in constant contact with heat, while the body of the animal was experiencing the heat of a *hot bed* while lying down. There was no escaping it. The conclusion was, that we had ignorantly been *manufacturing tender feet*, and the proof was apparent in this way. I substituted a *plank floor*, washed the legs and feet out clean, with cold water, 2 or 3 times a day, which retarded the fever in the limbs, and brought a returning moisture to the hoofs. She soon recovered *in every respect*, which convinced me of the too common error in the country of keeping horses on a *hot manure bed* instead of a hard floor.

From whence comes *pinched feet, corns, tenderness*, and swellings of the fetlock joints and legs? Do not too many cases begin in the *pens* where the colts are wintered, and stand in their filth, with occasional littering, for decency's sake?

Are not their young, tender feet susceptible of disease, and are not many contracted in this way? My *experience* satisfied me, and I was in season to save as sound an animal as ever travelled from impending ruin. I could trace no other cause. Should this communication meet the eye of Doct. DADD, we should be happy to hear his views in regard to it, through your excellent paper.

Knowledge upon this subject can do the *horse growing* farmers no harm—perhaps, much good. What he begins ignorantly to accomplish, is easily finished by an unskilful farmer, and a *hard, cruel* driver. Yours truly, H. P.

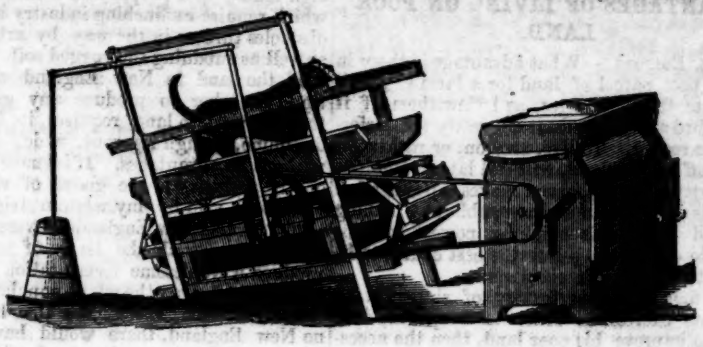
New York, June 13, 1854.

REMARKS.—There are few subjects which demand the attention of the farmer more than that of the proper management of the horse. A good horse, sound and kind, one that will work in any harness,—one that is not skittish, will not stumble, kick, overreach or interfere, and that is active in the carriage as well as steady on the farm, is now considered so valuable by those keeping but one, that scarcely any price will induce its owner to part with him. Such animals are very rare. The practice alluded to by our intelligent and observing correspondent, is quite common, and ought to be discontinued, and the floor occasionally washed with cold water and sprinkled with plaster or weak copperas water. —The efforts of Dr. DADD, a veterinary surgeon in this city, are calling more attention to the horse than has been given him heretofore, and we think will have a decided tendency, not only to improvement in the animal himself, but in the modes of treating and managing him.

CORK.

Cork is nothing more or less than the bark of an evergreen oak, growing principally in Spain and other countries bordering the Mediterranean; in English gardens it is only a curiosity. When the cork-tree is about fifteen years old, the bark has attained a thickness and quality suitable for manufacturing purposes; and after stripping, a farther growth of eight years produces a second crop; and so on at intervals of even ten or twelve crops. The bark is stripped from the tree, in pieces of two or three inches in thickness of considerable length, and of such width as to retain the curved form of the trunk whence it has been stripped. The bark peeler or cutter makes a slit in the bark with a knife, perpendicularly from the top of the trunk to the bottom; he makes another incision parallel to, and at some distance from the former; and two shorter horizontal cuts at the top and bottom. For stripping off the piece thus isolated, he uses a kind of knife with two handles and a curved blade. Sometimes after the cuts have been made, he leaves the tree to throw off the bark by the spontaneous action of the vegetation within the trunk. The detached pieces are soaked in water, and are placed over a fire when nearly dry; they are, in fact, scorched a little on both sides, and acquire a somewhat more compact texture by this scorching. In order to get rid of the curvature, and to bring them flat, they are pressed down with weights while yet hot.

TO FARMERS.—The *Hartford Times* mentions a farmer who took up a fence after it had been standing fourteen years, and found some of the posts nearly sound, and others rotted off at the bottom. Looking for the cause, he discovered that the posts which had been inverted from the way they grew were solid, and those which had been set as they grew were rotted off. This is certainly an incident worthy of being noted by our farmers.



CHURNING.

As the season of butter-making is at hand, it is a proper time to present to the reader whatever may facilitate the operation, and at the same time save manual labor. Churning is a laborious work even with the best churns, and under the most favorable circumstances; and occasionally, when the butter is long in coming, it becomes a discouraging and vexatious labor and one that severely taxes the patience. A gentleman extensively engaged in dairying in Western New York, once informed us that he had long used a machine somewhat similar to the one represented above, and operated it with a cosset sheep, who came at the call of a whistle and did the churning every morning. A large dog, or a child, will also answer the purpose well. The machine is now made so as to be very light, yet with sufficient strength to do the churning of a large dairy, or to drive a grindstone, or to be applied to other purposes.

The manufacturers describe it as a simple endless platform, formed upon two india rubber straps, with strips of light wood firmly rivetted to it. This endless platform is supported by a drum, about 12 inches in diameter at each end, and the whole so arranged that it can be elevated to any angle required by the weight of the dog, or work to be done by it.

It will be seen by the cut that the movement produces both the vertical and rotary motion, so that it may be applied to the crank or common dash churns, or both, at the same time. They may be found at the Agricultural Rooms of Messrs. Ruggles, Nourse, Mason & Co.—Price $12,50.

Feeding Poultry.—Professor Gregory of Aberdeen, in a letter to a friend, observes:—"As I suppose you keep poultry, I may tell you that it has been ascertained that if you mix with their food a sufficient quantity of egg-shells or chalk, which they eat greedily, they will lay twice or thrice as many eggs as before. A well-fed fowl is disposed to lay a large number of eggs, but cannot do so without the materials of the shells, however nourishing in other respects her food may be; indeed, a fowl fed on food and water, free from carbonate of lime, and not finding any in the soil, or in the shape of mortar, which they often eat on the walls, would lay no eggs at all with the best will in the world."

For the New England Farmer.

PROTECTING PEACH TREES.

Mr. Editor:—In the *Farmer* of last week you make a few remarks on peach blossoms; you ask if any person ever attempted to protect branches of the peach tree by bringing them together in the autumn, and covering them with matting or protecting them in any way other than by snow. In order to protect peach trees in this manner, it is necessary to keep the trees dwarfed by pruning, which may easily be done by beginning while the trees are small, as it is not the cold, but the sudden changes in the weather that we wish to protect the tree from. The covering need not be heavy; I have covered peach trees in the following manner:—take four long spruce poles and set them round the tree with the tops inclined to the top of the tree; tie the poles together at the top, then take some old mats and roll around the tree and make fast to the poles. I do not think it is necessary to cover the trees clear down to the ground, but only as far down as the branches. The result of this covering was a good crop of fruit, whilst the rest of the trees in the orchard were barren and fruitless. I think it is better to leave them open a little at both top and bottom, to admit air in warm weather; the peach being a fruit that is very uncertain in this part of the country, it is very important to try some way to have a few good peaches, for good fruit brings a good price at all times. Yours,

Swampscott, May 29, 1854. Blythewood.

Mixing Soils.—The benefit derived from the application of clay to very light, sandy soils, are often most remarkable. Clays may also be much improved by the application of sand, and those whose "garden spots" chance to be in need of either amendment, will find early spring the best time to attend to it.

For the New England Farmer.

ADVANTAGES OF LIVING ON POOR LAND.

MESSRS. EDITORS:—What advantage is there in having a poor parcel of land for a farm? I will try to state the advantages, as I view them, if it would afford any amusement or gratify the curiosity of the reader. To live, stay on, or rather get a living off of poor land, will call latent faculties into activity. If the farmer makes up his mind to get his meat, bread and vegetables, by making poor land better, his thinking powers will be called into exercise to select the best course to be pursued to accomplish his purpose.

In the first place, his faculty of skill will be called into exercise in order to adopt the best method to improve his poor land, then the necessity of his circumstances will confirm him in the habits of industry; and his wallet, not being very highly replenished with cash, will be a practical lecture to him on economy, and his ambition to accomplish his purpose, will excite his energy to action, and hope of reward will prompt him on to perseverance and patience "in well doing" to the time of harvest. Here we can see faculties and talents exhibited and applied to useful purposes which would have continued smothered in the bosoms of the rich, for the want of the compulsive power of necessity to excite them to action. The young man who is solely dependent upon his own efforts and resources, has every faculty for self-support called into requisition. The great display of mental and physical efforts is seldom the result of riches and luxury. The young man in easy circumstances, whose every want is supplied without any of his own exertions, has nothing to arouse or call his native faculties into exercise which have been in a dormant state, and till necessity is forced upon him, they will continue to sleep; he is educated to such numberless wants that it would be impossible to have them supplied from the products of a poor land farm. Would the inhabitants of New England have probably been more intelligent, energetic, industrious, persevering, enterprising, virtuous or even more wealthy had their soil rivalled that of the mighty and far-renowned valley of the Mississippi? Riches and rich land have a tendency to deteriorate, rather than to invigorate both the mental and physical faculties; idleness and dissipation are frequently the offspring of plenty. It was said by a farmer of my acquaintance who had lately bought a large worn-out farm, "that any clown could live on rich land but the man for me, is he that has skill and ability to get rich on poor land," which has frequently been done to my knowledge.

This farmer went to scattering leached ashes and compost upon his poor land, and soon had the satisfaction of seeing his crops, of grass, especially, increased to nearly ten fold. I have known numerous instances of young men of small capital to purchase poor farms because they were cheap, and in a few years become independent farmers, and as comfortable livers as any in New England. Discipline is necessary to make a good soldier, and equally necessary to make a good farmer. The New England farmers have been trained on what western people call hard, sterile land, but this very land has made them what they are; they are renowned throughout this, if not foreign lands, as a people well-trained in the arts, which require unflinching industry in overcoming obstacles thrown in the way by arbitrary rulers, as well as subduing the rugged soil.

If the land in New England requires three times the labor to produce any given quantity that the western land requires, it is a course of discipline, though rigorous, which has not been without its advantages. If idleness is the mother of vice, industry is the guard of virtue. It has often been said by my western friends, that the habits of the New Englanders were much needed there; they think the leven of industry might produce a wholesome fermentation which might, ultimately, leaven the whole population.

A modern writer observed that had there been no New England, there would have been no republic in America to boast of. Had the lot of the same men who have subdued the land covered with stumps and stones in New England, been cast upon the richest land of the great valley of the west, it is possible they might have been enervated, and their posterity become a degenerate race. They might have fallen an easy prey to the ambition and domination of the mother country, and to this day, been the humble servants of the British queen. Living on luxuries, sleeping on down, and having all wants supplied without knowing their value, does not qualify men to resist oppression or fill their brains with patriotic blood. Those who boast of living on the proceeds of three days' labor in the week, generally have very little reason to boast of their conduct during the other four days.

It appears by the reports of charitable associations that the residents on the hard soil of New England, subscribe more for various benevolent purposes, than the inhabitants of all the other States in the Union. So we fancy, Mr. Editor, that we can trace out some advantages by being inured to the hardships and constant employment growing from the necessity of our location as inhabitants of New England. SILAS BROWN.

Wilmington, 1854.

REMARKS.—Excellent. We hope every reader will give this article an attentive perusal, and especially those who find themselves in the possession of poor lands.

WEEDS IN DOOR YARDS.

One prolific source of spurious vegetation on our farms, is the neglect of which too many of our agricultural friends are guilty, to destroy, at the proper season, the weeds which befoul their door-yards, and unoccupied places by the road-side.

As the soil in such places is almost invariably affluent in the principles of vegetable nutrition, those weeds which are indigenous, ordinarily flourish with great luxuriance, and if not eradicated with a timely hand, produce an abundant crop of seeds, a very considerable proportion of which find their way in time, and by a variety of ways, to the fields and cultivated grounds, where they radicate, and render the labor of cultivation per-

plexing and unprofitable. Never suffer a weed to mature on your premises; cut down, root up and annihilate all. This is the only true policy. Thistles, white-weed, mullen, burdock, chickory, and a host of other indigenous and exhausting productions, which are of little or no value, are ever ready to spring up, and abridge the profits of the farm, and require no idle hand to hold them in check. All weeds are gross feeders, and sap the soil more than cultivated plants of equal size and weight.

BOOK FARMING A SWAMP.

Mr. Editor:—I have recently purchased about 20 acres of land, being a slice off from the sides of two adjoining farms, both now vastly too large. The soil is a light loam, perfectly free from stone and beautiful land to cultivate, but in a miserable state of cultivation. In the centre, on either side of the old line brush fence, is a muck swamp containing about two acres, which has been covered with alder bushes time out of mind, and has been the receptacle of the wash of the highway ever since the settlement of the town. In 1851, I let out the land at the halves, while erecting my building, and took what the unlucky tenant pleased to give me, which I assure you was no: much.

The last season I carried it on myself, and I increased the potato crop 55 bushels to the acre, the corn crop 20 bushels to the acre, and oats 20 bushels to the acre. I planted about an acre of corn on land so poor that the man of whom I purchased said it would not raise corn at any rate, and so all my neighbors said; but as I knew nothing about farming, I was fool enough to try. I began by carting 49 loads of manure, about half horse and cattle manure, rather strawy. I then plowed it, holding the plow myself, and I put in pretty much all but the beam and handles, and I must confess, that after the operation the land looked rather pale; but as "revolutions never go backwards," I was determined to go ahead. I took care that the manure was covered immediately after spreading—I then put into the hill, on about three-quarters of the piece, a liberal supply of the very best stable manure from a neighboring barn-cellar, and on the remainder I put swamp mud, that was carted out the fall before, and mixed with barn-yard manure in the proportion of one load of manure to eight of the muck.—Both patches were cultivated alike.

Now for the results. In four to six weeks from planting, the corn where muck was used, would weigh at least four times as much as the other, and was much more even and of a better color. Many of my neighbors examined the piece, and were perfectly astonished at the difference in favor of the compost, at the same time, remarking that the other would overtake it before harvest. The other did gain upon it, but was never nearly as sound and heavy. The difference, in the fall, was strikingly apparent. The crop I did not measure, but it was admitted on all hands, that more than an average crop was raised on what was termed a miserable piece of land wholly unfit for corn.

Now, Mr. Editor, that is *book-farming*, for I know very little about any other, and I intend to book-farm that swamp on to the rest of my land, after having prepared it in a barn-cellar; and if the land wont produce better crops than it did in other hands, then I will emigrate to the West, that's all. I do not think compost better for the land than stable manure, but I believe for a corn crop it is worth fifty per cent. more. W.

—*Journal of Agriculture.*

For the New England Farmer.

SHALL I BE A FARMER?

"Shall I engage in farming, and when," is the inquiry of your correspondent B., in the *Farmer* of the 6th inst. The question is asked of Massachusetts farmers; but a New Hampshire farmer ventures an answer,—which is, certainly engage in farming, if you are an intelligent, enterprising and industrious man,—and being a subscriber to the *New England Farmer*, is indication of intelligence at least. We want you to engage in the most ennobling calling that occupies human beings—cultivating the earth.

On the other hand, if you are a stupid dolt, believing that Adam and Abel knew all that is necessary to know about farming and rearing flocks, and that scientific culture is a humbug, and agricultural papers are a nuisance, then be advised to go thy way to college and a profession, or any where else, rather than to the farm, for the generous earth now mourns and looks sad by reason of so many stupid cultivators.

As it is of less consequence where a man is than what he is, if you are of the right sort, you need have no difficulty in selecting a spot of earth for a farm, that needs your care, and will reward abundantly your labor, both of head and hand.

Yours truly, W. H. Farmer.

For the New England Farmer.

WASH FOR FRUIT TREES.

Various compounds are recommended as washes for fruit trees,—as potash, ley, soda, white-wash, &c. In the January number of the *Farmer*, D. W. L. advises a mixture of soap suds, soap stone dust, lime and ochre, an application of doubtful utility I should think. Some of the above I know have proved injurious and destructive, and others I thing rather objectionable. The design of all washes should be to free the bark of foreign substances—as dust, moss, insects, &c., cleansing the bark, opening the pores and stimulating to healthy action. I have used with good effect, soap suds (for economy) that in which clothes have been washed, applied very freely with a sponge, and in some instances with a soft scrubbing brush. For two years past have used once during the growing season, (the month of June I prefer) soft soap, 1 part, soft water 2 parts, applied with a swab and rubbed quite hard; it should be used during damp weather or just before rain.

Cultivators of fruit trees now are very much annoyed with the green aphis, the bark and scab louse;—the woody aphis, has also made its appearance. For the first on apple trees I find a decoction of Quassia a perfect remedy. I make it quite strong—1 lb. of Quassia chips (costing 8 cents) to 8 galls. water boiled to 6 galls., applied with a garden syringe. To two or three trees badly infested, I found it necessary to make a second application. Previous to this experiment, the

trees had entirely ceased growing, the leaves curled up, and with the shoots and small limbs, became discolored and dirty. I tried various remedies with but little benefit, until at last I heard of Quassia. The trees in each instance soon after commenced a second growth, making vigorous shoots, entirely free of the aphis. I presume this decoction will prove equally efficacious and harmless on other varieties of trees, but have not tried. A white-wash of soft soap, water and lime is recommended for the bark louse. I have not tried it, but feel prejudice against any application which will form such a lasting coat—closing the pores of the bark. I believe that soft soap diluted with the Quassia water, will prove a remedy if applied early in the season, while the insects are young; I intend trying it. Will some of your correspondents experienced in this matter, advise as to the best mode of ridding our orchards of these destructive insects? A. G. H.

Waukesha, Wis., 1854.

OUT-DOORS AT IDLEWILD;

OR COUNTRY-LIFE WITHIN CITY REACH

BY N. P. WILLIS.

I find the farmers generally willing to admit that a boy's work for *four hours a day*, would fairly pay for his *board*. In pushing inquiry as to the different kinds of farm work, I find, too, that there is but a small portion of it which is beyond the strength of a well-grown lad of fifteen. For ditch-digging, hay-pitching, cradling of grain, wall-laying and heavy plowing, they would depend, of course, on the main strength of a regular "hand;" but for sowing, light-plowing, hoeing, weeding, carting and scattering manure, reaping, thrashing, and all the lesser industries of stock-tending and barn work, a smart boy is often as capable as a man. This applies to grain farms, or to those mainly devoted to hay and stock. Where the produce is only fruit or vegetables for the city market, the work is easier, and perhaps the whole of it could be done by boys.

* * * * * * * *

But boy-labor, to be reliable for the master, must not be boy-slavery. It must be enlivened and steadied by an understood footing of reciprocities between boy and master—both having an interest in its being faithfully done. And this is a state of things that could not be entered upon to-morrow—with the present general idea of how boys may be used. Information is sadly wanted on this subject. The most valuable addition that could be made, just now, to "literature for the people," would be a manual of boy-employment and treatment—defining his rights like those of a hired man, giving the terms of an agreement for his labor, specifying his privileges of spare time and agricultural instruction, describing the care of him by the mother of the family, and plainly stating the ways to make him think for himself and respect himself, and so be thought of and respected by those around him. With this kind of understanding, every intelligent farmer could profitably take half a dozen boys to work with his one or two hired men, and teach them farming while allowing them to play enough and read enough as well as earn enough—a Utopian idea for the present, perhaps, or, one at least by which the *poor* boy is not likely to profit for a while.

There is a class of boys, however, for whom I think a beginning might be made immediately practicable—the sons of parents who could clothe them, provide them with books and see to their schooling and incidental wants for the first year. [The *clothes*, by the way, are the sore spot in *boy wrongs* in the country, and the extinguisher to that *boy pride* without which his character becomes the fruitful soil for rustic meannesses. Among the old farmer's "dodges," the excuse for all his overworkings of the boy is "the money it costs to clothe and school him"—while the poor lad's habiliments are the remainders of the old man's worn-out coats and trousers, fitted and patched with such skill and taste as Heaven may have vouchsafed to the old woman's needle. The consciousness (No. 1) with which the "young farmer" walks about in a pair of patched and big-breeched pantaloons "fitted" by only cutting the legs off at the knee, and the consciousness (No. 2) with which he hears himself glorified by a political orator, a few years after, as the country's "independent bulwark," "bone and sinew," "nature's gentleman" and "best citizen," are two points between which, to say the least, there is a —— chasm.]

There are progressive steps of agricultural life under this phase, of course, which would follow in due succession. A literature for the boy-class of farmers is wanted—beginning with a simplification of so much of the science of soils and products as the youthful mind could readily understand. Other and correlative knowledge might be selected and combined into a series expressly designated THE YOUNG FARMER'S LIBRARY. A newspaper for them would soon flower upon this stem, and it is not difficult to imagine that the pride and enthusiasm of boys throughout the country might thus be gradually interested in the pursuit.

One word as to an important point—the subsequent setting up of the young farmer for himself. It would be but a "middling sort of chap," in this part of the country, who should have lived and worked in a neighborhood, for years, and not have character and credit enough to get trusted for land to live upon. Almost every one of our oldest and now independent farmers took his land originally on that tenure. But, while a much smaller quantity of land is wanted for the skilful and well practised gardener, the profits are far beyond those of ordinary farming. The soil increases in value, too, under the hand of the cultivator. By purchasing forty acres, he could so improve, while taking off crops, that twenty would sell, after four or five years, for more than the cost of the forty. This has occurred so often, as to be calculated on, among regular prospects and resources. And it is for this facility of a first start on arriving at manhood—a start upon character without capital—that I should advocate the education by boy labor upon single farms, in preference to education in Farmers' Colleges. Ever so well instructed in a large institution, the youth is adrift, when he leaves it. To have a farm, (as a stranger wishing to settle anywhere,) he must buy and stock it, with "money down." And, not only has the laboring boy the advantage of having supported himself, and extended his roots of character and credit where he means to grow and flourish, but the practice of his agricultural education has been *upon the soil, and in the climate,*

and among the associations, where his future industry is to be applied. He is already at home when he begins—already familiarized with the obstacles and resources which so vary with different locality. —*Home Journal.*

CHIMES FOR THE TIMES.

Be ye not jealous over-much,
But hope, and time will make you better:
There is a faith care cannot touch,
Which leaves the soul without a fetter.
O, it is but a sorry creed
To look for nothing but deceiving—
To meet a kindness, in your need,
With a smile of misbelieving!
The tide of ill is not so strong;
Man loves not always wrath and wrong.

It cannot be that every heart
Is steeled so much against its neighbor;
Let each with reason play his part,
And fruit will spring from out the labor;
Progressing still life's journey through,
Be just and kind towards your fellow,
Remembering whate'er you do,
That duty spreads the smoothest pillow;
And ne'er the hand of friendship spurn,
But trust, and man will trust in turn.

Some men there be who deem it good
In trade to overreach a brother;
And some who would not, though they could
Upraise a hand to help another;
They deem not, though convulsions wide
May show the earth by danger shaken,
That still of hearts unjust through pride
A dark and true account is taken;
Kingdoms may quake and thrones may fall,
But God is looking over all.

O, join not then the strifes of men,
But hourly show, by waxing kinder,
That ye have reached the moment when
Reason no more is growing blinder!
And though ye hope that time should yield
A change for each benighted nation,
Seek not at first so wide a field
To fling the seeds of reformation;
But sow them first in hearts at home,
Then trust in God, and fruit will come.

Annfield Pottery, Glasgow. WM. LYLE.

For the New England Farmer.

FOREST TREES FOR TIMBER.

How can these be successfully cultivated?

A primary purpose of the Legislature, in giving money to Agricultural Societies, was, to encourage the growth of such trees. Accordingly, for *thirty-five years* premiums were offered by each of the Societies favored by the bounty of the State;—but where are the trees? If you, Mr. Editor, can point to any plantation that has sprung up by reason of these offers, and grown to be worthy of notice, I should like to know it. That such trees will grow on our soil, there can be no doubt. The time is coming when an imperative necessity will exist, for their being made to grow.

When the generous offer of *one thousand dollars cash*, was made by R. S. FAY, Esq., of Lynn, for the *ten best acres of oak*, grown from acorns, on common pasture land, I had hoped that some of the owners of many acres of such land, from which little or no income is realized, would have been induced to make the experiment. This offer was made eight years since, payable in five years. But *one* claim has been presented, a brief statement of which, will be found in the last volume of *Massachusetts Agriculture*, pages 116 to 119. In relation to which, the committee who watched its progress, (consisting of gentlemen of as much experience and observation as any in the country,) say, "if the land is of any value for any other purpose, it will not pay for continuing a fence about it for this purpose,"—that is, in the manner in which this plantation was conducted. There was no want of zeal or knowledge in the gentleman who made this plantation—the land was in a timber growing region, where oaks have flourished for centuries—but still, the committee say, the culture will not pay.

Allow me to suggest, whether a few of the acres on the State farm at Westboro' cannot with propriety be appropriated to an experiment of this character. What more delightful appendage to such an Institution, than a flourishing grove of oaks! Let different modes of rearing be tried, and their various progresses be noted and reported.—*Sixty years* hence, when the boys who may assist in depositing the acorns, shall themselves be among those entrusted with the care of the Institution—they will bless the memory of those who suggested the experiment. ESSEX.

May 15, 1854.

EFFECTS OF CLOTHING ON THE HUMAN SKIN.

The *London Lancet* presents some excellent ideas on the subject of clothing. Let a person in bed be covered with sufficient blankets to promote perspiration, and let these blankets be covered with an oil or India-rubber cloth, or other impervious fabric; in the morning the blankets will be dry, but the under surface of the India-cloth will be quite wet. The blankets, by their dryness, show that the exhalations of the body pass through them, and would pass through them to the surrounding air had they not been intercepted by the impervious outer covering. Thus it is inevitable that the habitual use of an impervious covering is injurious. Its effect must be to place the body in a constant vapor bath, in which the insensible or healthy perspiration is constantly becoming condensed into the form of humidity, and being prevented from passing off in its elastic and invisible form, the perspiration is thus constantly checked, and skin eruptions must be the result. Nevertheless, it must be less injurious to check perspiration, in some degree, by a water-proof overcoat, than to get soaked with rain. There can be no doubt but water-proof fabrics may be made very light, and so formed as to be worn in wet weather, and yet allow some room for perspiration. But still they are not healthy, and should never be put on but in cases of extreme necessity.

Any person who has worn a water-proof outer garment for some time, knows by experience that it causes weakness and chills. No person should wear a garment but such as allows the vapor or perspiration which is continually exuding from the skin to pass off freely. For this reason a frequent change of entire clothing conduces to health. Clothing should be light and warm, and not too tight. A happy change in the fashions has taken place within a few years; it is the substitution of loose outer garments for the old-fash-

ioned, tight, close and pinching overcoats. Too few flannels are worn in America, especially along the eastern coasts, where sudden changes are frequent, and where many cold rains fall during the winter season. Children should always have their outer garments for winter made of woolen materials. Although India-rubber over-shoes are excellent for walking in the street in wet weather, or when there is a thaw with snow upon the ground, they should never be worn at any other time, and should be taken off as soon as the wearer enters a house. They prevent perspiration in a great measure, and are only useful as a lesser evil than getting the feet completely wet from outside water.

INTRODUCTION OF DOMESTIC ANIMALS.

The following account of the introduction of domestic animals into this country has been condensed from the Census Report. It furnishes a clue to the origin of our native cattle:

The first animals brought to America from Europe were imported by Columbus, in his second voyage, in 1493. He left Spain as admiral of seventeen ships, bringing a collection of European trees, plants, and seeds of various kinds, a number of horses, a bull, and several cows.

The first horses brought into any part of the territory at present embraced in the United State were landed in Florida by Cabeca de Vaca, in 1527, forty-two in number, all of which perished or were otherwise killed. The next importation was also brought to Florida, by De Soto, in 1539, which consisted of horses and swine, among which were thirteen sows; the progeny of the latter soon increasing to several hundred.

The Portuguese took cattle and swine to Newfoundland and Nova Scotia in the year 1553. Thirty years after, they had multiplied so abundantly that Sir Richard Gilbert attempted to land there to obtain supplies of cattle and hogs for his crew, but was wrecked.

Swine and other domestic animals were brought over to Arcadia by M. L'Escarbot, a French lawyer, in 1604, the year that country was settled. In 1608 the French extended their settlement into Canada, and soon after introduce various animals.

In 1609, three ships from England landed at Jamestown, in Virginia, with many immigrants, and the following domestic animals, viz: six mares, one horse, six hundred swine, five hundred domestic fowls, with a few sheep and goats. Other animals had been previously there. In 1611, Sir Thomas Gates brought over to the same settlement one hundred cows, besides other cattle. In 1610, an edict was issued in Virginia, prohibiting the killing of domestic animals of any kind, on penalty, of death to the accessory and twenty-four hours' whipping to the concealer. As early as the years 1617 the swine had multiplied so rapidly in the colony that the people were obliged to pallisade Jamestown, to prevent being overrun with them. In 1627, the Indians near the settlement fed upon hogs, which had become wild, instead of game. Every family in Virginia, at that time, which had not an abundance of tame hogs and poultry was considered very poor. In 1648, some of the settlers had a good stock of bees. In 1667, sheep and mares were forbidden to be exported from the province. By the year 1723, or before, sheep had somewhat multiplied, and yielded good fleeces.

The first animals introduced into Massachusetts were by Edward Winslow, in 1624, consisting of three heifers and a bull. In 1626, twelve cows were sent to Cape Ann. In 1629, one hundred and fifteen cattle were imported into the plantations on Massachusetts Bay, besides some horses and mares, and several ponies and forty-one goats. They were mostly ordered by Francis Higginsons, formerly of Leicestershire, whence several of the animals were brought.

The first importation into New York was made from Holland, by the West India company, in 1625, comprising one hundred and three animals, consisting of horses and cattle for breeding, besides as many sheep and hogs as was thought expedient.

FARMER'S GARDENS.

As a general thing, farmers do not provide themselves with good gardens; at least, so far as the writer has travelled, he has seldom seen what he would call a good garden on farms. The excuse for this neglect is generally the same with all of them—they "have no time to attend to such small matters." And yet it may safely be asserted that an acre of ground appropriated to a good garden, will be more profitable to the farmer than any other ten acres of the farm. The interests of the farmer, the comforts of his family, the good condition and health of his whole household, require such a garden on every farm in the country. And it should be a garden, not a mere excuse for one, a mere weedy patch. It should be one so managed and arranged, that every vegetable of a wholesome quality for human food should be raised in it, in perfection, and at the earliest season. After a winter's diet on solid and generally salt animal food, the human constitution requires the deterging operations of free vegetable and fruit diet, and as a general rule no one can dispense with it safely. Besides this, the natural appetite calls for it, and there are few pleasures that may be so safely and even beneficially indulged in. In the latter part of winter and early in spring, measures should be taken to secure *early* vegetables of all kinds capable of very early cultivation. Details will not be expected here; there are other books and papers appropriated to such information; but I cannot help saying that when I am at a farm house, at a season when early peas, beans, cabbages, cucumbers, potatoes, green corn, lettuce, &c., are properly in season, and find none of these luxuries on the table, nothing but the blue beef, salt pork and beans or potatoes of winter, I am free to say I do not envy that farmer's life, nor his family their enjoyments. These very people are fond enough of such things when they go to the city, and it is not, therefore, want of taste. It is simply the fault of negligence. Why may not every farmer in the State have every kind of early vegetables on his table as early as any gardener near the cities can raise them? There is not a single reason why he should not, while there are a great many why he should. The gardeners have to incur a very considerable expense in procuring *hot* manure for their hot beds, while the farmer has it in his barnyard. The gardener has every thing to purchase, and draw a considerable distance, while the farm-

er has nothing to buy. The small quantity of lumber required is probably rotting on his premises. It would only be a source of amusement during winter, for him to construct the frame of a hot bed and prepare the manure and bed for use. Having done this, and got his plants in a thrifty state, he can in a short time, when the season arrives, get his garden ground in order and make his plantations. And then he will have all these vegetable luxuries as early as any of his town friends can purchase them. It only requires a little industry and attention to accomplish this, and as said before, his enjoyment, his health, and even his interest, as well as the comforts of his family, will be benefited by it.—*Country Gentleman.*

FARMING.

Among the most vigorous class of people the farmer may be found. There are many ways by which men of this present age procure the necessaries of life: but no occupation is more conducive to health and happiness than farming. There are several ways by which this may be exemplified.

First.—In order to make the muscles of the human body rigid and strong, they should all receive their due proportion of exercise. Those trades and kinds of exercise that tend to give every muscle its proper share of action, both of the upper and lower extremities, are most salutary, as it tends to develope and strengthen them equally.

Second—The purer the air we breathe, the longer can the muscles be employed in labor. What department can be more thoroughly ventilated than the open fields?

Third—Light has as great an influence upon man as it has upon the plant, particularly that of the sun. You have doubtless noticed a plant that grows in the shade is weak and pale. The same is true of man; both, in order to make them strong, require the stimulus of this great agent.

There might be numerous other reasons brought forward to show that farming is most conducive to health; but it is useless to multiply them. In regard to happiness, I would ask but one question to be resolved in your minds. What is health but happiness? Knowing that farming promotes the greatest blessing, let each and every one of us be engaged in this business, for shop work, (particularly shoe making) does not bring the lower limbs into any action while the upper limbs are constantly employed. The air in-doors, where laborers are employed, is not so healthy as it is in the great department or shop, owned by Uncle Sam, which was not planned by man, and needs no ventilation. In-door work is not exposed to solar light; hence let us devote ourselves to that which affords us the purest air, and which exercises the muscles in the right mode; and that, as we have already proved, is Farming.—*Farmer and Mechanic.*

An Excellent Plan for Growing Cucumbers.—We clip the following from an exchange. We have tried the same plan and proved its excellence.—*Amer Agr.*

Take a large barrel, or hogshead; saw it in two in the middle, and bury each half in the ground even with the top. Then take a small keg and bore a small hole in the bottom; place the keg in the centre of the barrel, the top even with the ground, and fill in the barrel around the keg with rich earth, suitable for the growth of cucumbers. Plant your seed midway between the edges and the keg, and make a kind of arbor a foot or two high for the vines to run on. When the ground becomes dry, pour water in the keg in the evening—it will pass out at the bottom of the keg into the barrel and rise up to the roots of the vines, and keep them moist and green. Cucumbers cultivated this way will grow to a great size, as they are made independent both of drought and wet weather. In wet weather the barrel can be covered and in dry the ground can be kept moist pouring water in the keg.

THE MODERN HORSE DOCTOR.

This is a new work, containing practical observations on the causes, nature, and treatment of disease and lameness in horses, embracing the most recent and approved methods for the preservation and restoration of health. With illustrations. By George H. Dadd, M. D. Boston: John P. Jewett & Co. Cleveland, Ohio: Jewett, Proctor & Worthington.

We know Dr. Dadd well, and are satisfied that he possesses most important qualifications for preparing such a work as he has placed before us, viz:—the habits of a student, and the most untiring application of all his energies to the cause in which he is engaged. In many respects this is the best work we have seen on the subject of the diseases of the Horse. It treats of some diseases which have come before us, but which we have not before seen described and prescribed for, and what is a thousand times better, it denounces with a humanity creditable to the author, the barbarous practices which have prevailed through many years. This book advocates no burning of the mouths of colts with red hot irons, or drenches of oil of turpentine or nitrous and sulphuric acids. It is well printed, and illustrated with twelve very appropriate and interesting engravings. We shall have occasion to refer to it again.

For the New England Farmer.

THE MULBERRY AND SILK WORM.

Mr. Editor:—Will you allow me to make some inquiries through the columns of your valuable paper? There are near my residence some thirty or forty mulberry trees, and I wish to inquire if the silk worm could not be reared and the cocoons sold to some advantage; and if so, where they could be sold?

What is the expense of the machinery required to manufacture sewing silk, and where it can be procured? Also, where the eggs can be procured? If you, Mr. Editor, or any of your correspondents, will answer these inquiries, or give any information on the subject, it would very much gratify

A New Hampshire Girl.

Remarks.—We hope some of our young correspondents will be able to answer the above inquiries—we possess very little knowledge of the subject.

For the New England Farmer.

DOUBLE PLOWS.

MR. EDITOR:—I recently took on trial, have bought and am now using a double or Michigan Plow, of which I wish to say a few words to your readers, if, peradventure, there be any among them who doubt or are ignorant of the superior excellence of that plow over all others.

And, brother farmers, the best advice I can give you is, try it! try the Michigan plow, with a view to your own advantage, fully and faithfully, and you will be convinced that it is one of the things needful for the more successful cultivation of our *top-worn* and *surface exhausted* soil.

I have used my plow on plain and side hill, among briars, bushes and roots, turning furrows from six to twelve inches deep, and cutting from ten to sixteen inches wide, and every trial has been satisfactory, though I took hold of the matter, at the outset, faithlessly and reluctantly. And I now declare that I will use no other plow on sward land till some benefactor of his race (and who is more worthy of that application than he who invents a really useful agricultural implement?) shall produce an improvement upon the Michigan.

Upon the importance of deep plowing, most intelligent cultivators agree; and this is the chief excellence of digging deep and at the same time turning completely over a wide furrow slice, hiding all grass that may be growing on the sod, with finely pulverized soil. It is sometimes objected that soil turned up from a great depth is cold, dead and worthless; which if true, is obviated by the use of this plow, as it, instead of solely inverting the furrows, at the same time mixes and mingles the bottom and top soil together, thus producing just the result desired.

As it regards the strength of team necessary to use the double plow, I am convinced that four oxen will draw it easier than any other, doing the same amount of work, regard being had to the depth and width of furrow slice. E. J.

Lebanon, N. H., May 15, 1854.

For the New England Farmer.

HAY OVER THE CATTLE.

MR. EDITOR:—I have often queried whether there was any truth in the saying, that injures hay to lay on a scaffold over stables where cattle are kept through the winter. I, as most people do, select the best hay for oxen and cows, and put it upon scaffolds, where the same are stabled. I have often noticed the cattle would eat hay from the bays in preference to the scaffold hay. Now I wish some one more experienced than myself to answer the question, whether it does receive an injury? Yours truly,

NORTHERN SUBSCRIBER.

Canaan, N. H., May 15, 1854.

REMARKS.—In barns that are tight, we have no doubt that hay receives some injury in being over the leanto where cattle are tied. A gentleman recently informed us that an examination into this matter was made last year in the town of Grafton, this State, by several perso s, and they found the hay on scaffolds considerably affected, and, as they concluded, depreciated in value, by remaining over the cattle.

INDIAN MODE OF STORING THEIR WINTER SUPPLY.

This very brief sketch of the agriculture of the Indians would not be complete, without an allusion to their mode of storing their winter supply. Large holes were dug in the earth, and the sides carefully lined with bark. This was also the work of the women. The corn and the beans, after being dried in the sun, or on racks or flakes over a fire, were thrown into these holes, and then covered up level with the surface of the ground. They were thus preserved, if necessary, through the winter. These excavated barns were carefully concealed, by the women, from their lazy husbands and sons, lest they should discover and eat up all; yet, with all care they could take, the hogs of the colonists often unhinged their barn-doors, and helped themselves to the golden treasure. History says, that one of these Indian barns was discovered by the Pilgrims, at a time when their store of grain was so reduced as to contain but five kernels of corn to each individual.

In addition to this provision for winter, they sometimes made large boxes of wicker-work, or bags or sacks of hemp, which were filled and kept in the wigwam, for the more immediate wants of the family. Grass they had no occasion to cut, though it grew in great abundance along the marshes and the rivers, and in places which had been cleared for cultivation. It was of a coarse quality, yet it made the only hay used by the colonists for some time after the settlement.

To the rude implements used by the Indians, the colonists added the plow. We may well imagine the surprise of the natives at the first sight of a plow. They could not understand so complicated a machine. They wanted to see it work, and when it tore up more ground in a day than they, with their clam-shells, could scrape up in a month, and they saw the colter and the share to be of iron, they told the plowman if he was not the devel himself, he was very much like him.

The first sight of a ship, it will be remembered, had excited their wonder even to a greater extent. To them it was a floating island; it masts were nothing but trees; its sails were clouds; its discharge of guns was thunder and lightning; but, as soon as the thunder and lighining ceased, they pushed off their canoes to go and pick strawberries on the island!

After this cursory survey of the method of cultivating the earth, in practice among the Pilgrims and their Indian neighbors, we are better prepared to trace the progress of agriculture down to the present day. It was, at first, the only pursuit of the settlers, and long continued to be their chief occupation.

We have seen that poor and miserable cattle, poor and miserable implements—yet both as good perhaps, as the time and their means afforded—and poor and miserable ideas of farming, characterized the agriculture of the first English settlers. Nothing was done which was not forced upon them by the pressure of necessity. Their wants were so many, that it required their most vigorous exertions to provide what was indispensable, and they had no time to seek out new principles of ag-

ricultural science or improvements in practical agriculture.

The first few years were spent in extending the settlement, exploring the country, and seeking for new and better lands. In the space of thirty years, no less than forty small towns were incorporated, of which Springfield was the most western. An attentive observer is struck by the restless disposition to move from place to place, even in the early days of the settlement. Land new and rich in mould, the accumulation of ages, did not require very careful cultivation, to secure an abundant return. But a few years of constant cropping exhausted its productiveness. The proprietor could easily obtain other lands, to be subjected to the same process. He raised wheat until the land become too poor, and then he raised corn; and when it would no longer produce corn, he sowed barley or rye, and so on to beans.

The number of intelligent cultivators was few, and for the most part agriculture was in a state of extreme depression. This state of things continued with little change, down to the period of the Revolution. That it was so, will appear strange, when we consider that even in England, where land was high, comparatively, and the demands for produce much greater than here, there was, during the same period, none of the interest and enterprised which have since changed the whole face of the kingdom.

It should be mentioned, however, that in 1747, the Rev. Jared Eliot, of Connecticut, began the publication of a series of essays on farming, full of valuable suggestions, and marked throughout, by a degree of intelligence and good sense far in advance of his time. His experiments in draining, and in the improvement of salt marsh, are among the earliest attempts at real progress in the country.

But, with very few exceptions, there was no spirit of inquiry to give a charm to agricultural labor, and it was performed by the farmer as an evil which must be endured, from stern necessity. Having no love for his occupation, he paid no attention to the selection of the best stock, and the best seeds. Owing to the imperfect provision for schools for the great body of the people, the boy was trained up to a narrow routine of labor, as his fathers had been for a century before. He often affected to despise all intelligent cultivation of the soil, and not only scrupulously followed the example of his fathers, but also advised others to do the same; thus transmitting to us in the line of succession, the very practices which had originally been derived from the uncivilized Indian. The manner of settling new lands being such as has already been described, it will be seen that the population must have been scattered over a large extent of territory by the middle of the last century. Ten counties had been incorporated, and one hundred and forty towns. The proportion of the population collected in the great centres at that time, was comparatively small. Boston contained less than fifteen thousand inhabitants, and next to that stood Marblehead; but it might almost be said, that in neither of these did the houses quite shut out the woods and the fields; for in the former,—by far the largest town in the State,—the space now occupied by the Common and the western slope of Beacon Hill, including all the western part of the city, was used as a pasture for cattle. The spots where some of our most flourishing towns and villages now stand, were then covered with a dense forest.

Few of the rural population of that day saw a newspaper or a journal of any kind. At the commencement of the last century there was not one published in the State, and in 1750 there were but four. The circulation of these was confined, for the most part, to the metropolis; a few copies being sent to clergymen in the country. There were but six in 1770, and one of these was discontinued in June of that year, for want of support. The facilities of travel were so limited that few of the farmers ever went beyond the borders of their own towns, unless it were to market. It will be seen, therefore, that there was no opportunity of cultivating those larger and more generous sentiments which now mark the progress of civilization, and the spread of knowledge and intelligence among the people. Obstinate adherence to prejudice of any kind, is now generally regarded as a mark of ignorance or stupidity. A century ago, the reverse was the case. In many a small country town, a greater degree of intelligence than was possessed by his neighbors, brought down upon the farmer the ridicule of the whole community. If he ventured to make experiments, to strike out new paths of practice, and adopt new modes of culture; or if he did not plant just as many acres of corn as his fathers did, and that too in "the old of the moon;" if he did not sow just as much rye to the acre, use the same number of oxen to plow, and get in his crops on the same day; or hoe as many times as his father and grandfather did; if, in fine, he did not wear the same homespun dress, and adopt the same religious views and prejudices, he was shunned in company by the old and young, and looked upon as a mere visionary. He knew nothing of a rotation of crops. With fireplaces adapted to make the largest quantity of ashes, he had no idea of their use, and would have sold them for the smallest pittance in money. The use and value of manures were little regarded. Even so late as within the memory of men still living, the barn was sometimes moved away to get it out of the way of heaps of manure, by which it was surrounded, because the owner would not go to the expense of removing these accumulations, and put them upon his fields.

The swine were generally allowed to run at large, the cattle were seldom housed or enclosed at night, during the summer months, the potato patch often came up to the very door, and the litter of the yard seldom left much to admire in the looks of the barn or the house. Men who suffered their cattle to run loose in the summer nights, thought it necessary to let them run at large very late in the fall, and to stand out exposed to the severest colds of winter "to toughen." Orchards had been planted in many parts of the State, but the fruit was mostly of an inferior quality, and used mainly for the purpose of making cider.

In the latter part of the last century many left the seaboard and removed to the interior, to avoid the inconveniences arising from the difficulties between this country and Great Britain, and other causes. More attention seems, then, to have been paid to agriculture. The population had now become scattered over the whole State, and the whole territory had, in 1790, been incorporated into towns or districts. Men had begun to emi-

grate to the so-called inexhaustible West; which at that time, meant Central or Western New York.

A few public spirited and patriotic men now began to see the necessity of some such associated effort as should excite the public mind to such action as would lead to the development of the industrial resources of the State.—*Report of Sec. of Board of Agriculture.*

SLIMY SLUG.

[SELANDRIA CERASI.]

This insect is extensively known to pomologists as an inveterate enemy to the pear tree. It frequently makes its appearance all at once, and in such numbers, as well nigh to baffle the most energetic efforts to destroy or arrest them. They commence depredations, generally, on the upper surface of the leaves, eating out and entirely destroying the soft sapid substance forming the connections between the ribs, leaving each leaf upon which they locate and prey, in appearance, like a sieve bottom, or a piece of loosely fabricated gauze. Their physiological appearance bears no similitude to that of the canker-worm, being shaped nearly like a tad-pole. Their color is dun, sometimes quite dark, and their length is from an eighth to half an inch, but rarely more.

DOWNING speaks of this insect in his work on the "Fruits and Fruit Trees of America," page 328; and it is also mentioned by KENRICK, in his "Orchardist," page 55. Both of these authors recommend similar means for its destruction, and to them, all who are interested are respectfully referred.

A writer in an Eastern paper, remarking upon the *Selandria Cerasi*, by which his pear trees had been greatly injured, says:—"I bought, a month since, a garden syringe; also, a keg of whale oil soap, for seventy-five cents, and with these two articles of trifling cost, have destroyed thousands of flies, slugs, and worms, which infest plum trees, hop, melon and other vines. The soap will make even a full grown caterpillar wink, and derange his appetite effectually."

Another cheap and effectual method of destroying the "slug," is given by the same writer as follows:—"Take a piece of very coarse cotton cloth, say twenty inches square, and tie up the corners of it, enclosing one or two quarts of air-slacked lime, or unleached ashes therein, and make it secure to the end of a long, light pole. In the morning, while the dew is on, elevate the sack above the topmost branches of the tree, striking the end of the pole with a small mallet, occasionally, and moving the pole or sack about till every leaf is finely dusted over with the lime or ashes. This operation need not be repeated, if once thoroughly performed. The time requisite for a full grown tree is not over five minutes. Pear trees should be scraped, both tops and trunks, in May or June, and washed with a mixture of soft soap, lime and green cow manure, put on with a brush, as a very thick wash. Have a quart or two of iron scales or cinders broken fine around each tree. It keeps them healthy, and prevents blight. Washing the trunks and larger branches with strong soap suds, is another remedy highly spoken of."

The above recommendations are all well enough in judicious hands; but great care must be used in *scraping*—rubbing is a better term—and in the use of lime. Old plaster from the walls of houses, broken fine, and mixed with pulverized charcoal, bone dust, guano and gypsum, should also be placed around the roots, and incorporated thoroughly with the soil.

There are few departments of farming which more liberally remunerate the farmer, than fruit-growing. Our markets are but imperfectly supplied with many kinds of fruit, which are consequently in great demand, and at high prices.

There is a small "slug" which frequently proves destructive or highly injurious to the clover plant, in its earlier stages of development, and which is easily destroyed by lime. A very slight dressing is said to be sufficient. It is a fact generally well known to agriculturists of intelligence, that a very slight dressing of this mineral will, on light soils, bring in clover, a grass that makes a fine crop of valuable hay, with but very slight impoverishment to the soil. It has also been asserted, that its alkaline properties are effectual in destroying the *fungus* or mosses which often gather on the stems and branches of the trees. Look after the slugs in season.

For the New England Farmer.

ORNAMENTAL TREES.

In the *Farmer* for the present month you copy an article from the *Boston Journal* on the Natural Beauty of Ornamental Trees. Not agreeing with the writer, "R. M. C.," in the article referred to above, I beg leave to make a few remarks on the same. First, the writer sets down those who have the care of the forest and ornamental trees of your city, as ignorant pretenders to the title of gardeners, or foresters; it may be that they are ignorant of what is their duty, either as a gardener or forester, but does that take the name from the man of practice? I mean the man that has studied to be a forester, as much as our friend "R. M. C.," has studied at college to become a landscape and ornamental gardener? Why is it, I ask, that some gentlemen in Scotland and England employ six, eight, and in some cases, eighteen or twenty foresters, from one end of the year to the other, taking care of their forest and ornamental trees and shrubs? Surely, it cannot be to lay a ruthless hand on the trees entrusted to their care. No man worthy of the name, will cut a limb unless needed, any more than he would scrape the fair skin of his child, or the surface of an alabaster statue. In the choice of ornamental trees, the writer holds up the American Elm as

the most perfect of all deciduous trees. The American Elm is worthy of a place in every collection, but where will you put the English Elm, and the Rock Maple? Go to Vermont and see that noble tree in its state of nature, and you will see something far before the American Elm; and where in the list would you place the favorite Lime or Linden (English?) Take a walk, if you please, to the west part of your city, and where will you find elms to be compared with the trees of this class, planted six or eight years ago, in Charles Street? For rapid growth and beautiful foliage, there are few trees to be compared with the European Linden.

One remark on scraping or cleaning, and I draw to a close. When the elms or any other trees are removed from the country to the city, they do not enjoy such vigor as they do in the country; this can be helped by washing with soap suds, which will keep the bark clean and free from insects. A GARDENER.

Lynn, May 16, 1854.

For the New England Farmer.

WINTER WHEAT.

MESSRS. EDITORS:—As a Massachusetts man, and feeling a deep interest in all that pertains to her welfare, permit me to call the special attention of farmers to the letter of H. J. T., of Lunenburg, published in the *Ploughman*, May 6th, in relation to a crop of wheat raised in that town by Mr. Micah Marshall. He says, "the farmers of this town are determined to raise their own wheat—there were sown more acres of winter wheat last fall, than have been for the last twenty years."

Is not this example worthy the emulation of every town in your State? I look for this glorious millennium, among your farmers. I have urgently advocated wheat-growing for the past seven years. I have said, in the public prints, that I raised 25 bushels of winter wheat to the acre, averaged for six consecutive years, but I was accused by the publisher of having the "fattest kind of land." What else should the farmer cultivate but "fat-land?" Why should he go over four acres of ground to get 100 bushels of corn, if the same manure will give it on one acre? *Labor* is the cost, figures show it, as nearly three to one.

Your State is exalted above any other in scientific Horticulture. Among your people, it is little short of a mania. But, how commendable, how profitable. See that pear tree, loaded in graceful festoons, sixteen for a dollar!—running a stream of silver into your pockets, and setting your tongue afloat with an involuntary tide at a sight so charming. And thus, may we expatiate on the whole *fruit calendar;* but *bread* is the main stay of the farmer, and while he would bestow so much anxious care for a tree, and to produce every crop, he neglects *this main stay*—cherishing the long established impression, that there is no lime in the soil, and consequently there can be no wheat raised.

The Lunenburg farmer says, 136 years' improvement had not exhausted the lime. Here lies the fact, that every shovel-full of barn-yard manure possesses in itself, and restores to the soil, a certain amount of lime—so that land, *well manured, is well limed.*

Now, in what part of this "great country" does not wheat grow? South, West, North and East, even to the Bay of Fundy. Why should New England be exempt? *Is her geographical position wrong? Common sense gives the emphatic answer*—NO. It is as easy to raise *wheat* in New England, as it is to manufacture New England rum from molasses, and a much safer and more profitable crop for the people—(correct me, if I am wrong.) Then, farmers of New England, "Lords of the soil," wake up—make the trial, and my humble word for it, the *day you will never rue.* Respectfully, H. P.

P. S. Spring wheat makes dark, heavy flour, and is liable to rust, but the farmer is bound to try it this year. Winter wheat must be sown early in Sept., and in moist, heavy lands, planted deep that the roots may not be thrown out by frost, or should the blade be broken off, the roots will revive it again. At the West, wheat is plowed in. H. P.

REMARKS.—The above very interesting, and very useful letter, is from one of the sons of our beloved State, who has allowed the "cares of the world" to tempt him into the great "city of Gotham," but whose thoughts still come back to his first love. Like a true pilgrim, he cannot forget the pleasant homestead where he first knew the world, nor the interests of those with whom he began life's journey. He has frequently, and earnestly, urged upon the farmers of his native State the importance of cultivating winter wheat; we have seconded his efforts as we have had opportunity, and certainly have "practised what we preached," for we have now between two and three acres of the winter blue stem growing, and as handsome as ever stood upon the ground. There is no difficulty, in our opinion, in producing as fine wheat in New England as on the Short Hills in Virginia, or the best lands in Western New York. We hope to see a liberal breadth of land made ready for this crop for sowing early in September.

For the New England Farmer.

THE CURCULIO.

MR. BROWN:—I have young plum trees that have borne a little fruit annually, most of which the curculio has destroyed. Last year they came into full bearing, and being loth to lose the crop, as soon as the destroyer came, I took soap suds that had stood in the sun some days, and had become quite putrid, with which I wet the fruit and foliage effectually, and then dusted it over with dry slaked lime. I had no doubt of its efficacy, but expected to apply it two or three times; it succeeded, however, beyond my most sanguine expectations. I applied it but once, and I think there was not a single plum touched on the trees by the insect. On one tree near by, that was not thus treated, I could not find a plum that had not two marks of the insect, and on one I counted *thirteen.*

JOSEPH HADLEY.

Hydepark, Lamoile Co., Vt., May, 1854.

For the New England Farmer.

ELLEN JONES.

A STORY FOR GIRLS.

One fine December night, the air was clear and cold, and three children were pressing their faces against the window, eager to catch the first sound of bells—sleigh bells.

"I see them," said Eddy, the youngest of the three, who was allowed the favor of standing in a high chair, and thus looking out through the upper squares of glass; "I can see something."

"Let me stand in your chair a moment, Bub," said Lizzie. "Yes, I believe it is father and Ellen," said she.

"I know it is," said Mary, "for I hear the bells; it's our bells."

Even the mother's eye beamed with unwonted pleasure as her youngest darling exclaimed, "here they are, father and Ellen! O, Ellen, she looks like a queen—with a feather in her bonnet; how beautiful!"

A general rush was made for the door as Mr. Jones tenderly, and perhaps a little proudly, handed his eldest daughter from the sleigh.

How the younger children crowd around, eager to observe every look and catch her tones, as she receives her mother's warm grasp, and returns her proffered kiss. To them, sister Ellen was quite an important personage; aside from her being the eldest daughter, she had been six months in a Seminary. Having been in a city, was, to the brother and sisters, in itself a great event. That much was expected of Ellen, they were fully aware; many little arrangements, and alterations in household matters, had they joined with their mother in making, solely in reference to Ellen's return.

Farmer Jones felt a glow of honest pride as he gazed on Ellen's fine face with a look of love. Certainly sister had improved in personal appearance—so thought the children, as after tea they all gathered around the open fire-place, and turned their eyes to mother's right hand, where sat Ellen in the little rocking-chair.

Mr. Jones, instead of reading his weekly paper as usual, damp from the press, dries it carefully before the blaze, and lays it upon the table; to tell the truth he knew he shouldn't understand or remember a word if he read, for his mind was now with his children, particularly with the one who had just entered the home of her happy childhood.

The children ask Ellen a few questions, which she answers, not quite as readily as they had supposed she would, and mother tells them, "that as Ellen is tired, and almost enough of a stranger to be called company, she thought they ought to entertain her."

"Come, Eddy," said she, "can't you tell Ellen something that has taken place since she left us? I think you can say something that will please and interest sister; just think, she has been away from us since June."

Of course, little Eddy supposed his sister would be as much interested as himself, and commenced with, "O, Ellen! we've had such nice times, only we wished you had been here," and then the girls joined with Eddy and recounted the many joyous, free, and merry times that good children who live in the country know all about. How in summer they ranged over the green fields, or played beneath the shade of the tall pines in the deep wood, and in the winter, when the air was clear and bracing, and the long hills covered with the icy snow, how the boys drew their sleds up their smooth sides, and with the girls glided swiftly down and far over the interval below. O, those were merry times; even farmer Jones' eye lighted up with pleasure at the recital.

"It's fine coasting now, is it, my son?" said Mr. Jones. "Ellen will be a fresh customer for you to-morrow; 'twill take a day or two to rub off the city polish, wont it though?" turning to Ellen and patting her under the chin.

"I don't know, father," said Lizzie, "the city girls that I've seen are as big romps when they are out here, as any of us. There's cousin Kate and Jane, when they were here last summer, they could beat us all; yes, and how everybody loved them; nobody was afraid of them, for all their father was so rich."

"What made everybody love them?" said Mrs. Jones, who had looked a little sad for a few minutes.

"Because they were so kind-hearted," said Lizzie.

"Because they were so real polite," said Mary.

"It was because they wern't a mite proud," said Eddy, "and every time I see old lame Isaac, he asks me something about them, and says, 'raal ladies them was.'"

Somehow the evening wore away pleasantly enough, but without Ellen's seeming quite so free and glad, so happy and satisfied, as was Ellen of a year ago. The children easily accounted for this if they noticed it, by supposing it was a very sad thing to part with teachers and school-mates. They retired and left Mr. and Mrs. Jones arranging matters for the morrow as they sat by the bed of bright coals.

"Wife," said Mr. Jones, "they give me a very good account of Ellen at B. Mrs W. says she is a fine scholar,—ambitious,—and a good share of self-respect. They all advised me to have her return in the spring. But the question is, can we afford it? We've had to make an extra effort to do what we have for her; but there, if I was sure she would repay us, I shouldn't mind that or more."

"We can tell better how to act in this matter when spring comes,—we will try and make Ellen happy at home till then," said Mrs. Jones.

"Heigho! well, I've a notion it takes more to make girls happy that have been to these city schools," said Mr. Jones.

The next morning found the family seated around the breakfast table before it was dawn; Mr. Jones being a hard-working, industrious man, found the old maxim, "Early to bed" &c., for his special interest. They knew it would require some effort for Ellen to rise an hour earlier than had been her custom; so as she did not appear, they said it was "no matter; bye-and-by she would get up as early as any of them." Ellen made her appearance soon after the family left the table.

Just now Mr. Jones entered and said to the children, that George and Sarah S., children of their nearest neighbors, were coming with their sleds, and if their mother could spare them for an

hour, they might go to the top of the hill and slide. "Where's Ellen?" said Mr. Jones, "call her; there'll be no better coasting this season, and of course, George S. knows of no one that he will be more pleased to see on his sled."

"Ellen is up stairs;" said Mrs Jones, "but I hardly think she will go."

'Go! why yes she will go, or else she is not Ellen Jones. Call her, mother, and we'll see."

As Ellen entered, it was evident to Mr. and Mrs. Jones that something was the matter, for there were traces of tears, and her countenance was by no means a happy one.

"Ellen," said Mr. J., "George and Sarah S. are coming with their sleds—the children have gone to meet them; would you like to go out and slide down hill with them a few times? You can spare her, can't you, mother?"

"I would rather not go," said Ellen, without raising her eyes from the floor.

Mrs. Jones now silently motioned to her husband to say nothing further to Ellen. She was left alone with her daughter, who looking out of the window asked her mother, "if things always looked alike to her?"

Mrs. Jones smiled, and saying that was a queer question, replied that the same things did appear differently at different times, for the reason that we view the same objects with such various feelings. "I expect you enjoyed yourself very much while you were away, this winter and summer; you were happy, were you, my daughter?"

"Yes mother, happier than I shall ever be again, if I've got to stay at home," replied she, at the same time bursting into tears.

"Why, my child, do tell me why you feel so, why this change? I must know Ellen; your happiness is very dear to me. Do not let us see you unhappy, if it is in our power to make you feel otherwise."

"Well, mother, perhaps 'twould have been better to have let me stayed at home."

"Why, my child?"

"Because, there is everything beautiful in the city, and of course I must, I could not help being happy there. Uncle's house is so different, so much pleasanter, so much more elegant than this. O, this looks like a prison beside it; their kitchen looks prettier to me than our parlor. And then aunt never works as you do; it is far pleasanter to have servants. O, I wish I had never gone from home, and then I shouldn't have known but it was well enough here;" and Ellen drew a long sigh.

"Well, my dear, if you don't wish it, we will not again send you; you will forgive your father and mother for placing you in circumstances which caused you to be so unhappy. Surely we made a great mistake, and O, Ellen, *you* don't know how great an effort we made, to give you these advantages."

"I don't want you to talk so, mother."

"But my dear, you are taking a wrong and mistaken view of everything, and O, Ellen, how little you know of the world; if I had time, I would tell you how, for months before you left us, your father and I exerted ourselves to give you an opportunity to acquire knowledge, and to make you happy. Let me beg of you, Ellen, not to speak to your father, as you have to me; it does seem to me that you can overcome these feelings at once, if you choose—at any rate you will shortly, if you will make an effort, and cherish kind and gentle feelings. Will you try?"

"Yes, mother, but it's no use; I can't make believe contented."

The children returned and gave Ellen an account of their hour's enjoyment. "Such a good time," exclaimed Eddy, "you never had down to uncle's, I know; George was real sorry not to see you, Ellen."

In the evening the family were seated around the open fire-place whose cheerful blaze made shadows on the wall, and threw its light over the whole.

"Now for some popped corn, Eddy, and some apples," said Mr. Jones.

"Yes, father, I've got it all shelled ready." See our new corn-popper, Ellen," said Eddy.

Ellen said nothing, but looked as though it were a little beneath her dignity to notice such childish things. After a few moments' shaking—pop, pop, snap,—and it was quickly turned upside down, and emptied of its snow-white kernels. Soon the large dish was filled, and the red-cheeked apples were beside it. Ellen was now quite cheerful, more so than she had been since her return, and the evening passed pleasantly. Sweetly sounded her fine voice as with her mother she joined in singing

"There is a land of pure delight,"

and when she knelt with the others, and her father prayed that they might be "that happy family whose God is the Lord," how did her mother's heart fill with grateful emotions to the Giver of every blessing.

Ellen took a candle from the mantel, and lighting it, pleasantly bade her father and mother "good night;" as she closed the door, her mother heard her exclaim.

"What is it, Ellen," said she; "did you not speak to me?

"No, but it is shockingly disagreeable to have these tallow candles; it's too bad, tallow dropping upon my dress; so different from uncle's gas lights—well, I must bear it, no use to say a word—though I despise these things."

Mrs. Jones closed the door and made no reply.

"Wife, what *ails* Ellen?" said Mr. Jones, as she reseated herself. "What has got into her? I think it's pretty well, if we've got to make an effort to raise money to send the children away to school, only to come back and despise home. It seems to me she has made up her mind to be unhappy. What course shall we take with her? It is having its effect upon the younger ones—they look up to Ellen. Do you think Eddy didn't say to me out in the barn to-day, 'that the reason his feet were so cold was, because we had no carpets on the floor;' I asked him how he knew, and he said 'Ellen said so.'"

"I'm very sorry," said Mrs. Jones, "but Ellen is not really unamiable—once let us touch her better feelings, and certain I am she has them, and she will shew as kind and as true a heart as any child we have got."

"I know it, but 'twont do to be harsh, we can't scold it out of her; and I'm afraid we can't coax it out very quick."

"Shall you go to the village this week?" asked Mrs Jones.

"Yes, I shall go day after to-morrow; shall we let Ellen go over and spend the day?"

"That is what I was thinking of," replied Mrs. Jones. "We must be gentle as well as firm, and her good sense will show her better, bye-and-by, I hope."

Pleasantly felt Ellen, if we judge from her beaming countenance, as seated in the sleigh by her father's side, on a fine morning, she bade her mother and sister "good-bye;" pleasant visions of village girls, rich furniture and charming music were flitting through her mind, and a feeling like contempt for her own home, and something like pity for its inmates mingled with these pleasurable feelings. "But they don't know any better," she inwardly felt. "Yes, and didn't you," said a little timid voice speaking from the chamber of her secret thoughts, "didn't you enjoy your childish sports at home, when you didn't know any better? Didn't you have a better time when you played in the oak pasture; yes, and didn't you have a better time in the garret, even, playing blindman's buff, than in uncle J.'s parlors?" Then Ellen was almost obliged to own to herself that 'twas so. Then she thought how full of enjoyment the children were the day before, when it stormed, sitting on grandmamma's settle, and calling it uncle's velvet lounge.

"Well, it's because they don't know any better, and I *do know* better. I wont stoop or bend to their homely notions again;" and Ellen tossed her head with quite an air for a young Miss, in confirmation of this thought, as her father reined his horse to the door of a shabby looking cottage, in one of the back streets of the village they had just entered.

"Now, Ellen," said her father, "I want you to get out here, and stop a spell; I am going to the mill to get this bag of corn ground, and may be you would rather not have any of your young friends know that you rode with a bag of corn."

Ellen blushed, for she didn't suppose till that moment, that her father understood her motive, when she expressed a wish to walk part of the distance. "If I shouldn't call for you very soon, Ellen, don't be worried, for you will find an old friend here; try and enjoy yourself, and be sure and stay till I call for you; there, give these things to Mary," said he, handing her some bundles; "don't knock, walk right in."

"Mary, Mary," thought she, hesitating a moment on the door-step, "it must be Mary Teel, who lived with us when mother was sick;" and then she heard a lullaby noise, and the faint wail of an infant, and softly she opened the door of a dark entry. Closing this, she felt her way to the opposite door, and entered a little room. She was for a moment, unable to distinguish objects, but a kind, though unfamiliar voice greeted her, and placing a broken chair by the stove, invited her to be seated. Ellen now looked around the dark room; dark, not because there was no pleasant sunlight without, but because there was but one little window of four squares for it to gain admittance to this attic room.

In one corner was a low cot bed, upon which lay Mary Teel. Little had Ellen seen of sickness,—yet one glance told her that Mary was very ill. Then as her eye wandered from the bed to the mean and wretched appearance of everything in the room, she for a moment had a feeling of disgust, and felt unkindly towards her father for leaving her there. It was but for a moment, however, for Ellen, as we said before, had a kind heart, and when she saw Mary's baby lifted from its little broken cradle, and placed in the bed by its mother, and heard the woman who attended her describe her intense sufferings, with that distressing sickness, the rheumatic fever, her heart melted.

No visions of her uncle's splendid parlors now rose before her, but she was thinking how Mary, pretty Mary Teel, two years ago, watched by the sick bed of her mother, with a heart as free from sorrow and care as was then her own. Then as Mary, awaking from the fitful slumber into which she had fallen, placed her bright eyes on Ellen, the color on her cheek heightened, and she reached out her thin hand to grasp Ellen's, which was quickly placed in her's—feeble was the grasp, yet it thrilled through her inmost soul.

"'Tis kind in you, so kind, to come to see me, 'a friend in need is a friend indeed!' Such a sweet thought I had while I was sleeping; I thought your dear mother stood by my bed side, and with her sweet voice she sung

'Pain and death and night and anguish,
Enter not the realms above.'

and now you will sing it to me—O, I wish you knew some more, my head is so weak, I can't think much."

Ellen placed her hand over her eyes, now swimming in tears, and thought for a moment; "I believe I know some of it," said she; then bending low she repeated,

"Endless pleasure, pain excluding,
Sickness there no more can come,
There no fear of woe intruding,
Sheds o'er Heaven a moment's gloom."

Mary listened with clasped hands and closed eyes, and then softly added

"Lay thy supporting, gentle hand,
Beneath my sinking head."

Then in a gentle whisper she asked Ellen if she could sing it like her mother. She did so with a low, sweet voice, and Mary remained silent for a few minutes after looking earnestly at her; then motioning for her to lean over the bedside, she whispered in her ear, "Are you happy, dear? O yes, you must be; I am, I have everything to make *me* happy." Ah! those words sunk deep in a kind but sensitive nature.

Where were Ellen's fancied sorrows? Scattered to the winds.

Mary now slept, and Ellen for the first time thought of the articles her father gave her for Mary. She untied the bundles, and first were a dozen candles—"tallow candles." "O, kind in ye dear, to bring them," said the woman, "we've got along nicely though; we've burnt rags in a little dipper of grease, but it's not so neat, you know. You must be used to sickness, dear," she said as Ellen handed up the other articles, "to know how we needed just these things."

"My mother is," was the reply. "Well, dear, surely you was kind as could be, to come here—young folks like you aint always so thoughtful like, but you'll have your reward. *She*," pointing to the bed. "*she* is a saint, and oceans of sorrow she's waded through. When her husband died and left her in sore want she never mur-

mured a word, nor in all her sickness, nor no time, has a sharp word fell."

How changed were Ellen Jones feelings, as ere she placed her head on her pillow that night she prayed "deliver us from evil." Then did she feel that no evil indeed had ever fallen upon her. And in after years, when she had become a useful and a happy woman, did she often recur to that visit, believing that God taught her there, that "to make others happy, is one of the truest objects of life." M. F. D.

Brentwood.

THE POOR MAN'S MAY.

We have had repeated occasion to extract some beautiful passages from poets who are now moving in the humblest walks of life. Of these, John and Mary Saunders are worthy of especial note, for the extreme sweetness and simplicity of their productions. They do not aim at lofty subjects, but are content with those that come peculiarly within their own observation. Hence their poems are natural, and because natural, they are pleasing.

Sweet May! they tell me thou art come:
Thou art not come *to me;*
I cannot spare a single hour,
Sweet May! to welcome thee.
God knows how hard I've worked this week,
To earn my children bread;
And see, we have an empty board,—
My children are unfed.

And art thou still the same sweet May
My childhood loved so well,
When humming like a happy bee,
Along some primrose dell,
I thought, O! what a lovely world
Is this, dear God has given,
And wondered any one should seek
For any other heaven?

The hawthorn buds are come again,
And apple blossoms too;
And all the idle, happy birds
May sing the long day through.
The old green lane awakes once more,
And looks, perhaps, for me;
Alas! green lane, my heart may die—
I cannot come to thee.

SINGULAR CASE OF INSTINCT IN A HORSE.

We do not remember ever to have heard of a more remarkable exhibition of equinine intelligence than was communicated to us a few days since by Mr. Allen, of this place. The circumstances as they were narrated to us are as follows:—

Mr. A. had for a considerable time a span of sprightly little horses, that he had never separated. In the stable, in the field, and the harness, they have always been together. This has caused a strong attachment to grow up between them. A few days ago, he went with them out to Lake Minnetooka, on a fishing excursion. Taking them out of the carriage, he led them to the lake and tied them several rods apart on a strip of grass that grew upon the shore, and left them to feed. Returning to the shantee, he threw himself upon the floor, to await the return of the party who had repaired to the lake to fish.

Not much time had elapsed before the sound of approaching horse's feet attracted his attention, and a moment after, one of his horses appeared at the door. The animal put his head in, and giving one neigh, returned at a slow gallop, yet under evident excitement, to the spot where but a few moments before, he and his companion had been seemingly safely fastened. Surprised to find his horse loose, and struck with his singular conduct, Mr. A. immediately followed, and found the other lying in the water, entangled in the rope, and struggling to keep his head from being submerged. While Mr. A. proceeded to disengage the unfortunate horse, his noble benefactor stood by, manifesting the utmost solicitude and sympathy, and when his mate was extricated from his situation, and again upon his feet upon terra firma, the generous creature exhibited the most unquestionable signs of satisfaction and joy. That this intelligent animal should have noticed the unfortunate situation of his mate—that he should know where to apply for rescue, and in his efforts should sunder a three-fourths of an inch rope, and finally that he should exhibit so high an appreciation of the event, are curious circumstances to us, and commend themselves to the thoughtful consideration of those who would limit the power of reasoning to the "genus homo."—*St. Anthony's Ex.*

DEMOCRACY OF SCIENCE.

BY JOSIAH HOLBROOK.

Consolidation and diffusion are two operations distinct and opposite. Both are witnessed in wealth, government, religion, knowledge, and nearly every thing human. However applied, the one is despotic and the other democratic. The nature of man and the progress of society tend to consolidation at the expense of diffusion. The spirit of republicanism is to promote diffusion and put checks upon consolidation; and that, too, as connected with all the leading interests of human beings.

Democracy of science is the subject now under view. The true democracy of science is "TO INCREASE AND DIFFUSE KNOWLEDGE AMONG MEN"—the design of Smithson. This is also not only a great, but *the* great object of national and State policy—not to consolidate but diffuse knowledge; and knowledge interesting to all, especially farmers and mechanics, as they constitute more than seven-eighths of all civilized communities.

The development and the application of the natural resources of our country stand first and foremost in furnishing that kind of knowledge interesting to all. It shows possessions and the modes of using them—strictly the "USE OF TALENTS." But with development and application there may be diffusion; there may also be consolidation. It is one thing to have our mineral resources developed, and a knowledge of them so diffused that every farmer may know the character and capabilities of his own fields. It is quite another thing to have our country subjected to scientific explorations, however full and complete, and the results placed in ponderous volumes, and those volumes confined to the shelves of college and State libraries, to be little read and less understood. The one is diffusion, the other consolidation. The one is carrying out the purpose of scientific explorations, and applying the knowledge obtained by them for the benefit of those who need it, and those who paid for it; the other is evidently a perversion of funds designed for diffusive knowledge, wealth, morals, and power, to personal pride and individ-

ual aggrandizement. The one tends to democracy, the other to despotism.

As the spirit of the age is the democracy of science—the diffusion, not the consolidation of knowledge—an attempt will be made to point out several subjects of science, with such plans and modes of promoting them as will tend to bring knowledge to every man's door, and to give to it free access by every farmer's son and every mechanic's daughter. As the schools of our country constitute or ought to constitute not a "*national university*," but a "UNIVERSITY OF THE NATION," special endeavors will be made to present such subjects, plans, and modes as will aid in training the young beings composing them for success in their future vocations; to put them on the track of "PRACTICAL SCIENCE, PRODUCTIVE INDUSTRY, AND CHRISTIAN MORALS."

EXTRACTS AND REPLIES.

POISON FOR RATS.

Can you inform me through your paper what is the best poison for rats where hens are kept?

Boston, May 25, 1854. A. S.

REMARKS.—Sprinkle about a little flour or meal for a day or two, and after that add a small quantity of strychnine.

LIGHTNING RODS.

Will the Editor give through the *Farmer* the necessary information in regard to lightning rods. Are they a *safe and certain protection* from the fluid? Of what materials and how should they be constructed? Are buildings or persons injured ever, or life destroyed when they are properly put up? By answering these inquiries and adding such information as you may wish in regard to the whole subject, I doubt not you will oblige many of your readers. Yours truly,

Essex, Vt., May 20, 1824. S. G. BUTLER.

REMARKS.—The subject is an important one, but in a season like this, when much of the usual spring work is crowded into the space of a few days, we cannot give that attention to a matter like that which is the subject of inquiry above, which it merits. Nor shall we ever be able to say that no person has ever been injured where rods are properly put up. Last summer we noticed some eight or ten accounts in the papers, of destruction of both life and property by lightning, and in every case there were rods attached to the buildings struck. Unless properly put up we believe there is more danger than to be entirely without them. Perhaps some of our correspondents, blessed with leisure and good will, may make themselves useful in a consideration of this subject.

Our friend will please bear in mind that farming is our business, and that we believe fully in the "old saw,"

"Not with his hands, but with his sight,
The master keeps his workmen right."

CULTIVATION OF STRAWBERRIES.

I wish to inquire the method of cultivating English strawberries? What time in the year should they be set out, how set, and what land will they do best on? DAVID E. BROWN.

Franklin, N. H., 1854.

REMARKS.—The best season for setting strawberry plants is in the spring—in May. Set one row, then 15 inches off another, and 15 inches more another row; then leave a path 30 inches wide. After they have been cultivated a few years, the plants may be transferred to the 30 inch path, and the bed renewed. For field culture, plant the rows three feet apart so as to cultivate with a horse.

LIME—TURNIPS—THE SEASON.

How shall I apply oyster shell lime to the soil to the best advantage? My soil is a heavy, moist loam, with a *hard pan* bottom, some two or three feet from the surface. (*a.*)

Will turnips, either English, or ruta-bagas, do well for winter food for stock, sown at this season of the year, or any time in May? Will they not grow large, corky and nearly worthless, sown at this season on good land? I have a piece of new hill burnt land, cleared last fall and sowed to rye and seeded, but the rye has nearly all winter-killed. The soil is good, but the most of it is too rocky and stumpy to plow; will carrots do anything on such land without the use of the plow? I have queried a good deal in my own mind what kind of a crop to sow (or plant even) to get the best return for my labor, and the more I queried, the farther I was from coming to any conclusion as to what was the best method for me to pursue, and in my dilemma I ask for advice. (*b.*)

The season is very backward in this region as it must be throughout the country. Ground *froze hard* last night, and water nearly three-fourths of an inch thick, making the cattle which have been turned out look rather sorry. We hope we have had our last freeze for this spring, and that vegetation will soon make rapid strides.

Mr. Charles C. Stevens, of this town, gave me a Malay hen's egg, which measured 2 inches in diameter, 3 inches long—6¼ inches in circumference one way, and 3 inches the other way. Is that often beat? JAMES A. BLAKE.

Warwick, Mass., 1854.

REMARKS.—(*a.*) Sow a part of the lime broadcast and a part in drills or the hills and note the effect. The slightest covering will be sufficient.

(*b.*) Your burnt hill land will be excellent for turnips; the common flat turnip will probably succeed best, as the ruta bagas require a mellow and somewhat deep soil. The middle or last of July will be early enough to sow the seed, and if carefully raked in on such land, you may reasonably expect a most abundant crop.

SIGNS OF HEALTH IN SHEEP are, a skittish brightness, clear azure eye, florid, ruddy eye-strings and gums, teeth fast, breath sweet, nose and eyes dry, respiration free and regular, feet cool, dung substantial, wool fast and unbroken, skin of fine florid red, particularly on the brisket.—*Lawrence on Cattle.*

For the New England Farmer.

FRENCH MERINO BUCK, "OLD TIGER."

Old Tiger is 5 years old, 185 lbs. weight of carcass, 16 lbs. 11 oz. weight of fleece, and very clean for unwashed wool. The wool is fine and even for that variety. His stock is superior, and sought after by many of our best wool growers. I have repeatedly refused $500 for him. I purchased Old Tiger, as he is called, August 20th, 1850, of Mr. A. S. Bingham, of Cornwall, Vt.; he is known as the *Tainter Stock*. I paid $200 for him, and I confess that it has been the best investment I ever made, having realized the sum of $1200 profit from him in three years. My present flock consists of French, Silesian and Spanish Merinos, selected mostly from Mr. Campbell's celebrated flock, who is now breeding each variety distinct, except in a few cases of cross with each other, which have thus far proved very satisfactory.

Very truly,

Brattleboro', Vt. A. V. Stockwell.

PROSPECTS OF THE SEASON.

The frequent rains and cool weather have given the fields an unusual richness; on old fields grass was considerably winter-killed, and the crop will be rather light, notwithstanding the favorable weather; on fields more recently laid down the prospect for a full crop is favorable. Winter rye, and the few pieces of winter wheat we have seen, look well. Oats and barley also promise well now. Corn has generally come well where it has not been scorched by coming into contact with guano. We have heard of a good many acres to be replanted from this cause. The grain must not come in contact with the guano, even though the latter is mingled with four or five parts of loam. Nor should the guano be in a mass below the kernels, because when the root strikes down into it, the guano is quite sure to kill it. When guano is applied to the hill it should be scattered over a surface one or two feet square. Potatoes are up well and generally look finely.

There is good promise of a fair fruit crop. Cherries will not be so abundant as last year, but in some sections quite plentiful. The peach crop will be light—the winter was too severe. If we mean to secure an annual crop of this delicious fruit, we must devise some way of protecting the trees. See two articles in last week's paper on this subject. Apples promise well, a sufficient amount of fruit hanging on to give a good supply, where the worms have not destroyed the foliage. The caterpillars came early and were numerous, and in some of the towns near Boston have been succeeded by the canker worm, which has made great havoc among the orchards. In passing through the town of Marlborough last week—said to be the second best farming town in the State—we saw numerous orchards nearly defoliated by caterpillars; the branches were bare of everything but the huge, ugly nests of the caterpillar—a striking contrast to the usual good husbandry of our agricultural friends in that beautiful town. On the whole, the prospects to the farmer are encouraging; prices of all kinds of produce are high, and with diligence and economy, he cannot fail to reap a fair reward for his labor.

For the New England Farmer.

[CORRESPONDENCE No. 2.]

APPLICATION OF LIME AND ASHES

FOR THE IMPROVEMENT OF LAND.

Shoreham, Vt., Feb. 27, 1854.

MR. HOLBROOK :—Dear Sir,—Although you are a stranger to me, personally, you are not through the press, and as you frequently give your views on different subjects relating to agriculture, I should be pleased to receive a communication from you on the application of unslacked ashes and slacked lime.

My soil is mostly of a deep, rich, dry loam, some of it heavy, some light, and plaster of paris has had a good effect, and I am told has been applied for 30 years past. My crops have not been as large and good as the cultivation would indicate.

Generally, I have raised winter wheat after corn, and the most I ever raised was 28 bush. per acre—average 14 bush. Since I have been on the farm (15 years) I have not raised a first rate crop of winter or spring wheat; there has been some defect, either it would lodge; be too thin; the fly would injure it; or the rust would strike it and spoil the berry.

Now can I not apply ashes or lime to advantage and have a larger and more equal yield?

Refuse lime can be had for three cents per bushel within three miles, and I think ashes can be bought in town for 6 or 8 cents, as there is no ashery, and most of the farmers prefer to sell them. I have thoughts of applying ashes and lime to grass lands when they are dry, but have no experience, and do not wish to use many without more knowledge than I have on this subject.

I have previously paid more attention to raising grain than grass, but am convinced with the present high price of labor that the profits of the farm would be larger should I reverse it and give the grass crop the preference.

I think since 1839, the average crop of hay has not been over ¾ of a ton per acre, and pasture in proportion.

Should you be pleased to answer this communication, it would be received as coming from high authority, and I shouldgovern myself accordingly. An early reply will much oblige

Your humble servant, ——— ———.

DEAR SIR :—Your letter of Feb. 27th, was duly received, and I take the first convenient opportunity to answer it. Omitting your name and residence, I reply to your inquiries through the medium of the *New England Farmer*, hoping that thus I may be anticipating inquiries kindred to yours from other persons and saving some writing, and trusting that under the circumstances you will not seriously object to this mode of communication.

The exhaustion of land by long-continued applications of plaster, without suitable applications of stable manure, has been often illustrated. Plaster stimulates the soil to give up its fertility freely to growing crops, but does not enrich it like organic or stable manures. Perhaps to a greater or less extent this is your case.

Probably your land needs rest from wheat, as generally it is a crop which will not, to an equal degree with several other crops, bear repetition at short intervals on the same land. Throw wheat out of your rotation for a few years, or at least cultivate a less breadth of it for a while than heretofore, and make the intervals longer between growing it on a given field; as thus your land will be gaining what it has been robbed of by the wheat, while at the same time it will be yielding well in other crops, and ultimately, will give you good crops of wheat again.

As your land is mostly a deep substantial loam, by giving it large doses of lime you might for a time realize a considerable increase in your crops of wheat, and indeed in most other crops; but such application, without corresponding dressings of organic or stable manure, would ultimately exhaust your soil. On this mode of using lime is founded the proverb—"lime enriches the fathers but impoverishes the sons;"—the reason of which is, that its principal or more powerful action upon the soil is chemical and mechanical, rather than as manure in the strict sense: chemical, as an alterative and stimulant, rendering whatever of fertility the soil contains, whether free, or locked up in noxous compounds, readily available to the growing crops; mechanical, in modifying the texture of the soil, such as by opening and loosening stiff loams and clay, making them more permeable to air, heat and moisture, and easier to work. But it is not my province to deal very minutely in theoretical considerations, and I shall therefore reply to you mostly in the practical view. I would commend to your attentive perusal, "Lectures on Agricultural Chemistry," by Prof. Johnston, wherein you will find the whole subject of lime as used in agriculture, as well as many other important matters, very fully, clearly and ably discussed. You would also do well to read "The Field Book of Manures," by Browne.

If you can buy lime and ashes at anything like the prices you name, you had certainly better employ them, in connection with organic substances, in the improvement of your land. Mix the lime or ashes with muck from swamps and bogs, rich turf, the rich soil washed into hollows and ditches, pond mud, &c., making up the compost heap in a similar mode to that indicated in my correspondence with another gentleman, recently published in the *Farmer*, and marked No. 1. But as he proposed using fresh lime, which increases in bulk three or four fold by slaking, and as you design using refuse lime already slaked, you had better mix from three to five bushels with a half-cord of the muck, &c., with or without salt, as you may deem expedient. By applying lime or ashes in compost as above stated, you can use a larger quantity to the acre than would be advisable if they were applied alone, and will realize all the good effects they can naturally produce, without the disadvantage of ultimately exhausting your soil, as the vegetable organic matter of the compost will maintain and increase the staple of the soil. It will be well to spread as much as twenty-five or thirty loads of the compost to the acre,—harrowing it in on the surface rather than plowing it in deep, as the tendency of the lime and ashes is downwards in the soil. If convenient, make up the compost several months before it is wanted for use, as age improves its quality; but a few weeks before will do.

If instead of raising grain so exclusively as you say you have heretofore done, you turn your attention more to the production of grass and the

rearing of stock, you will be in the way of making more manure than formerly to give back to the land,—especially if you cart waste substances, like those above named, to the barn and yards to be mingled with the cattle-droppings,—while at the same time the change will afford more rest to the land, so that it will improve in some qualities now feeble or missing.

If in this latter way you can make manure enough to dress the fields well, then, inasmuch as you can buy lime and ashes at so very low prices, you may probably find it advantageous to use them as alteratives and stimulants, in the form of top-dressings. You doubtless understand that it is not advisable to put lime with stable-manure, as it induces violent fermentation and throws off the ammonia of the manure. But apply the manure to your hoed crops, of corn, potatoes, &c., and then the next year, or whenever you sow the land with grain and grass seeds, apply lime and harrow it in with the seeds. It will tend to sweeten the land, increase the grain crop, bring in the grasses well, and keep out sorrel. During the time the filed is in grass, you can profitably top-dress it once with ten to twenty bushels of ashes to the acre.

The quantity of lime which it is politic to spread on an acre of land, depends considerably on the quality of the soil, and the climate in which it is located. Stiff clays, and deep moist loams rich in vegetable substance, will bear a larger dose of lime than dry shallow sands or gravel; and a given variety of soil will bear more lime in a humid than in a dry climate. The farmers in England and Scotland are said to use from one to two bushels of lime on a square rod of ground, or at the rate of 150 to 350 bushels per acre. But this is a very heavy dose even on their stiff soils and in their humid climate, and would probably be of very doubtful utility with us in New England. You had better apply a bushel of lime on from two to six square rods, or from 25 to 80 bushels per acre, as experimental trials shall dictate.

If the stables and yards do not afford all the manure you want for the tillage-fields, you can make up the deficiency by composting lime or ashes with muck, &c.

Other fields, in grass, which you wish to make more productive than they now are, by a cheap process and in the shortest practicable period, may be smoothly turned over in September, dressed with twenty to thirty loads of the compost of lime or ashes with muck, &c., seeded directly with herdsgrass and red-top, and in the spring with clover. This compost will also be good to use on such portions of the pastures as are level enough to plow.

If your plows are of the too common sort which can only skim the surface of the land, cast them aside and procure larger and better ones, and plow each field deeper and deeper at each rotation of crops, till you have made a good active soil nine to twelve inches deep.

Very truly yours,

F. Holbrook.

Farmers, note this.—In a cloudy morning, it is a matter of importance to the farmer to know whether it will be sunshiny or showery in the afternoon. If the ants have cleared their hole nicely, and piled the dirt up high, it seldom fails to bring a clear day to the farmer, though it may be cloudy till ten or eleven o'clock in the forenoon. Spider-webs will be very numerous about the tops of the grass and grain some cloudy mornings, and fifty year's observation has shown the writer of this that these little weather-guessers seldom fail in their predictions of a fair day.—*Ex.*

THE VOICE OF THE GRASS.

This charming little poem we have lately seen in the English papers without a signature, and published as belonging to England. It was written by Mrs. Sarah Roberts, of Portsmouth, N. H., and was originally printed in the *Portsmouth Journal*.—Mary Howitt, in her "Pictorial Calendar of the Seasons," quotes it with high praise. It is worthy of it.

Here I come creeping, creeping everywhere;
By the dusty roadside,
On the sunny hill-side,
Close by the noisy brook,
In every shady nook,
I come creeping, creeping everywhere.

Here I come creeping, smiling everywhere;
All round the open door,
Where sit the aged poor,
Here with the children play,
In the bright and merry May,
I come creeping, creeping everywhere.

Here I come creeping, creeping everywhere;
In the noisy city street,
My pleasant face you'll meet,
Cheering the sick at heart,
Toiling his busy part,
Silently creeping, creeping everywhere.

Here I come creeping, creeping everywhere;
You cannot see me coming,
Nor hear my low sweet humming;
For in the starry night,
And the glad morning light,
I come quietly creeping everywhere.

Here I come creeping, creeping everywhere;
More welcome than the flowers,
In summer's pleasant hours;
The gentle cow is glad,
And the merry bird not sad
To see me creeping, creeping everywhere.

Here I come creeping, creeping everywhere;
When you're numbered with the dead
In your still and narrow bed,
In the happy spring I'll come,
And deck your silent home,
Creeping, silently creeping everywhere.

Here I come creeping, creeping everywhere;
My humble song of praise,
Most gratefully I raise
To Him at whose command
I beautify the land,
Creeping, silently creeping everywhere.

The Connecticut Valley Farmer.—We intended to have called attention to the May number of this excellent paper before. It is published at Springfield by S. Bowles & Co., and edited by Professor J. A. Nash. The farmers, and indeed, men of every occupation, will find the *Connecticut Valley Farmer* not only an instructive, but an *interesting* paper. Prof. Nash gives it much of his own earnest spirit, while his teachings are sound and valuable for all. The people of the Valley not only, but over the broad land, would be benefited by a perusal of its pages.

THE ARMY OF WORMS.

In the summer of 1770 this whole section of country was visited by an extraordinary calamity, such an one as this country never experienced before or since, beyond what I shall here specify. It was an army of worms, which extended from Lancaster, N.H., to Northfield, Mass. They began to appear the latter part of July, 1770, and continued their ravages until September. The inhabitants denominated them the "Northern Army," as they seemed to advance from the north or northwest, and to pass east and south, although I did not learn that they ever passed the high land between the Connecticut and Merrimack rivers. They were altogether innumerable for multitude. Dr. Burton, of Thetford, Vt., told me he had seen whole pastures so covered that he could not put his finger down upon a single spot without placing it upon a worm. He said he had seen more than ten bushels in a heap. They were unlike anything the present generation had ever seen. There was a stripe upon their backs like black velvet; on either side a yellow stripe from end to end; and the rest of the body was brown. They were sometimes seen not larger than a pin: but in their maturity they were as long as a man's finger, and proportionably large in circumference. They appeared to be in great haste, except when they halted to procure food. They filled the houses of the inhabitants and entered their kneading-troughs, as did the frogs of Egypt. They would go up the sides of the house, and cover it in such a compact column that nothing of the boards or shingles could be seen! They did not take hold of the pumpkin vine, peas, potatoes or flax; but wheat and corn disappeared before as by magic. They would climb up the stalks of wheat, cut off the stalks just before the head, and almost as soon as the head had fallen to the ground it was devoured. To prevent this the men would "draw the rope," as they termed it; that, is two men would take a rope, and pulling from each other until it was nearly straightened, they would then pass through their wheat fields, brush off the worms from the stalks, and by perpetual action they retarded the destruction of their wheat; but it was doomed finally to extinction.

There were fields of corn on the meadows in Haverhill and Newbury standing so thick, large and tall, that in some instances it was difficult to see a man standing more than one rod in the field from the outermost row But in ten days from the first appearing of the "Northern Army," nothing remained of this corn but the bare stalks! Every expedient was resorted to by the inhabitants to protect their fields of corn, but all in vain. They dug trenches around their fields a foot and a half deep, hoping this might prove a defence; but the ditches were soon filled, and the millions that were in their rear went over on the backs of their fellows in the trench, and took possession of the interdicted food.

About the first of September, the worm suddenly disappeared; and where they terminated their earthly career is unknown, for not the carcass of a worm was seen. In just eleven years afterward, in 1781, the same kind of worm made its appearance again, and the fears of the people were much excited; but they were comparatively few in number, and no one of the kind has ever been seen since.

This visitation, which destroyed the principal grains for that year, was felt severely by all the settlements; for it not only cut off their breadstuffs, but deprived them of the means of making their pork to a great degree, and reduced the quantity of fodder for their cattle. The settlements at Haverhill and Newbury did not feel this calamity quite so much as those infant settlements in the towns north and south of them. They had been longer in their settlements, had some old stock of provisions on hand, and had the means to procure supplies from Charlestown, or by the way of Charlestown. Jonathan Tyler, of Piermont, related to me that that settlements in that town were left without means of subsistence from their own farms. His father drew hay on a hand-sled upon the ice from the great Ox-bow in Newbury to support his cow the following winter. And had it not been for two sources opened for their support, they must have deserted the town. One was the extraordinary crop of pumpkins in Haverhill and Newbury. The corn being cut off and the pumpkins remaining untouched by the Northern Army, they grew astonishingly and seemed to cover the whole ground where the corn had stood, and the yield was great. The people of Haverhill and Newbury gave the settlers of Piermont the privilege of carrying away gratis as many pumpkins as they would. They went up, made a kind of raft, and transported them by water to Piermont. The raft was simply an inclosed space made by four timbers within which the pumpkins floated on the water. It was towed by men in a skiff.

Another source of support was open to them in the immense number of pigeons which Providence sent them immediately on the disappearance of the Northern Army. Nothing could equal their number, unless it was the worms that had preceded them. The Tylers of Piermont, Daniel, David and Jonathan, commenced taking pigeons on the meadow west of Haverhill Corner, and in the space of ten days they had taken more than four hundred dozen! They carried them to Piermont, and made "a bee" for picking pigeons; and two or three times a week the people of Haverhill were invited down to Mr. Tyler's to pick pigeons.—Those who went had the bodies of all they picked, the Tylers having the feathers; and they made, says Jonathan Tyler, "four decent beds of those feathers." The bodies of these pigeons, when dressed, dried and preserved for the winter, were very palatable and nutritious, and proved a good substitute for other meats.—*Power's History of Coos.*

A HORSE'S FOOT.

The foot of a horse is one of the most ingenious and singular pieces of mechanism in the animal structure, and scarcely yielding to any in regularity, and in complexity of parts, and simplicity of design. The hoof contains series of vertical and thin laminæ of horn, so numerous as to amount to about 500, and forming a complete lining to it. Into this are fitted as many laminæ belonging to the coffin bone; which sets are elastic and adherent. The edge of a quire of paper, inserted leaf by leaf into another, will convey a sufficient idea of this arrangement. Thus the weight of the animal is supported by as many elastic springs as there are laminæ in all the feet, amounting to

about four thousand, distributed in the most secure manner, since every spring is acted upon in an oblique direction. Such is the contrivance for the safety of an animal destined to carry greater weights than that of its own body, and to carry those, also, under the hazard of heavy shocks.—*Macculloch.*

HONEY BEES.

The Albany *Cultivator* has an interesting article on honey bees, from the pen of a distinguished professor, from which we quote the following paragraph.

"Many, nearly everybody supposes that the bee culls honey from the nectar of flowers, and simply carries it to his cell in the hive. This is not correct. The nectar he collects from the flower, is a portion of its food or drink; the honey it deposits in its cell is a secretion from its mellific, or honey secreting glands, (analogous to the milk secreting glands of the cow and other animals.) If they were the mere collectors and transporters of honey from the flowers to the honey comb, then we should have the comb frequently filled with molasses, and whenever the bees have fed at a molasses hogshead. The honey bag in the bee performs the same functions as the cow's bag or udder; merely receives the honey from the secreting glands, and retains it until a proper opportunity presents for its being deposited in its appropriate storehouse, the honey comb.

Another error is, that the bee collects pollen from the flowers accidentally while it is in search of honey. Quite the contrary is the fact. When in search of nectar, or honey, as it is improperly called, the bee does not collect pollen. It goes in search of pollen specially, and also for nectar.—When the pollen of the flower is ripe, and fit for the use of the bee, there is no nectar; when there is nectar, there is no pollen fit for use in the flower. It is generally supposed, also, that the bee constructs the wax, from which its comb is made, from such vegetable substances. This is likewise an error. The wax is a secretion from its body, as the honey is; and it makes its appearance in small scales or flakes, under the rings of the belly, and is taken thence by other bees, rendered plastic by mixture of the bee's mouth, and laid on the walls of the cell, with the tongue, very much in the way a plasterer uses his trowel."

A NEW REMEDY FOR THE CURCULIO.

Mr. A. Robinet, of Bedford, Cuyahoga county, Ohio, communicates the following to the Cincinnati Horticultural Society, as the result of an experiment of one season, but needing further trial to confirm its value. We have little faith that it will be found effective, but as it is easily tried, we will give it a place.—*Ohio Cultivator.*

"Last spring I determined to save my plums if possible, and accordingly provided myself with two wooden bows bent by a small cord fastened to each end so as to form a semi-circle of such size that when the two were placed together, a perfect circle was made about 7 or 8 feet in diameter; the intermediate space of each semi-circle was filled with sheeting. These I at regular intervals placed on the ground beneath the trees and shook the trees so as to bring down usually at each shaking from 10 to 80 curculios, which were destroyed. Finding that my sheeting mildewed when on the ground, I suspended each sheet to a branch on the tree, so as to dry. When returning to shake the trees, I found that not a single curculio could be obtained from a tree on which a sheet had been suspended. I removed the sheets from tree to tree with the same result—no injury was done to the fruit on any tree from which the sheet was suspended.

The coming season I shall suspend one piece or more, (varying according to the size of the tree,) of about one yard, painted white, made fast to two small pieces of wood, suspended from the centre of the top stick to a branch of the tree, and shall suspend these on the west side of each tree. Should the tree be large, I should recommend adding two or more additional sheets."

SALT YOUR STOCK.

Most persons, probably, are aware of the beneficial effect of salt upon the human system. By the ancients, salt was held in high estimation, and every one has doubtless noticed how extremely insipid meat and vegetables are when cooked without it, or with only an insufficient supply. Horses, cattle and sheep, in short all domestic animals, should be regularly supplied with it at all seasons. The liberal use of this mineral improves their condition and promotes their health, and when they have acquired the habit of partaking of it freely, there is no danger to be apprehended from their taking too much.

Salt promotes digestion, and destroys or dislodges worms, which at certain seasons effect a lodgment in the stomach and alimentary canal. We have, most of us, probably witnessed with what avidity wild, and undomesticated animals seek at certain times the creeks and estuaries which indent the shores of the ocean—the "salt lakes," and what long journeys, dangers and difficulties they voluntarily encounter to reach them. This is the result of pure instinct; it is not to be attributed to mere caprice, as some have imagined.

Horses, sheep, neat cattle and swine are all equally eager for this sanatory and invigorating substance, and cannot be maintained in a healthy and thriving condition without it. The former, it has been remarked, when liberally supplied with salt, are seldom afflicted by the "bots," or with that scarcely less to be dreaded disease, the cholic. In salting sheep, especially during the vernal months, when the green, succulent and highly fermentable matter of which they partake has a tendency to create stomachic derangements, we have thought it advisable to have a shed erected, and fitted with a range of boxes, in which a supply of salt can be constantly kept, and to which the animals, at all times, can have free and unrestrained access. A mixture of one part salt to two or three parts of wood ashes, may also be deposited

in some of the boxes. This mixture possesses highly sanatory properties, and should be provided for all animals, particularly when first sent to pasture. They soon acquire a relish for it, and partake of it with great avidity.

Salt is also a valuable article in compost. According to CUTHBERT JOHNSON'S statement, it is now extensively used for this purpose by the farmers of Great Britain, and has been found singularly beneficial, particularly on light soils. The "squash-vine destroyer," he says, is easily prevented from committing its depredations by the application of *brine*, which is also a preventive of *aphides*, or plant lice, which so frequently lay waste the turnip and cabbage yards. But it should here be observed, that the direct application of very strong brine will prove fatal to the plants, and that it should be used for this purpose only in a weak state. By pouring it around the roots, it will tend to dislodge worms and other insect depredators.

NEW PLANTS.

Considerable attention, yet much less than the importance of the subject demands, has been lately devoted to the introduction of foreign seeds into this country. We have now within the limits of our government, every variety of soil and climate, and we are dependent upon foreign countries for many articles which, by judicious cultivation, might readily be supplied from our own resources; and many other articles which have long been raised here, are susceptible of a great improvement in their cultivation and preparation for market. Something has been done by the National Institute, something by the local agricultural societies, and something by enterprising and liberal seamen, who have brought home the seeds, and plants, and animals of other countries, and added new products to our own. Some of the staple products of the country originated from seeds which were brought here as an experiment, or by accident; and it is probable, that of all the articles which enter largely into consumption with us, there is comparatively few which might not, with proper care, be raised within some part of our widely extended boundaries.

Indigo and madder are two articles for which very large sums are sent from this country.—Both might be profitably raised here. Indigo was once extensively raised in the Southern States, and the adaptation oi our soil and climate to the production of madder has been repeatedly proved. A very interesting, and we believe satisfactory, experimrnt, has been tried in the raising of tea. Excellent wine has been produced in the Western States, and in some of the Southern, and it is said that we have regions as well adapted to the cultivation of the grape as any in France or Italy. The snbstitution of light wines for the distilled spirits of home production would prove of no disadvantage to the cause of temperance. We believe it is a well-attested fact, that intoxication is rarely witnessed in wine-growing regions. The cultivation of flax and hemp will receive an impulse from the new process which is exciting so much attention. New kinds of fruit, and new varieties of those already cultivated here, might be introdued with great advantage.

More attention has been given to the introduction of improved breeds of animals than to seeds and plants. The effect of this is seen in the improvement of nearly every kind of domestic animal—horses, cows, oxen, hogs, sheep; but the introduction of new species of animals has not received so much consideration. A discussion has indeed been raised upon the practicability of introducing the camel for the overland journey to the Pacific, and something has been said of attempting to domesticate the bison. The latter, we have little doubt, would be successful, and very beneficial; the former appears to be rather chimerical. Yet we will not undertake to say that the camel, or even the elephant, might not be employed with advantage in some part of the country. At least, we shall never know till we try.—*Providence Journal.*

For the New England Farmer.

PROTECTION FOR FRUIT TREES IN WINTER.

MESSRS. EDITORS:—In answer to an inquiry in your last week's paper, whether trial had been made by any one in protecting the peach, I am happy to say that I have tried it with complete success. I have peach trees in their fifth year, which have never suffered in the least from the coldest weather. This place is situated one degree north of Portland in the White Mountain region, about 700 feet above tide water. The prevalent idea that extreme cold alone will kill the peach, I believe must be abandoned; or rather, the idea that when the thermometer is 12° below zero it is fatal; I have contended for several years, that it is not so much the extreme cold as the strong winds, pelting sleet and snow, and sudden changes of temperature, that affect the peach. We had the thermometer once last winter at 34°, and at several times from 12° down to that extreme degree of cold, and yet our peach trees that were protected by matting or fir boughs were not injured at all.

My practice is this. Late in the fall, I draw the limbs of the tree together and put round some matting, a single fold will answer, drive a stake down by the side of the tree and fasten the tree to it. One man can protect from one to two hundred trees in a day; care should be taken not to unwrap them too early in spring, so as to expose the fruit buds to the late frosts.

I also protected a locust tree in the same way, simply by lashing a few fir boughs to the northwest side of the tree. It now looks as bright as if it were growing in the latitude of Philadelphia.

I can see no reason why peaches cannot be raised in any part of Maine simply by protecting them in this way. It may not be known to all of your readers that although we live so far to the North, the ground is rarely frozen to any extent, in winter. The early snows prevent this, so that it is only the tops of such trees that need special protection. It is useless to attempt the cultivation of the peach in this State without some kind of protection; they may survive one, two, or even three winters should they be mild, but the fourth may kill them all down.

I can see no reason why the tender varieties of dwarf pears and plums may not be protected in the same way, and thus largely increase our luxuries. A little pains must be taken even with the apple tree to make it flourish. I have known persons object to cultivating the Isabella grape, simply because they were told that the vines must be protected through the winter; such a person ought not to possess many comforts.

N. T. TRUE.

Bethel, Me., May 27, 1854.

REMARKS.—We thank Mr. TRUE, and "BLYTHEWOOD," for their prompt, interesting and valuable replies to our queries about protecting peach trees. We have often thought of trying the experiment with matting, but never found the *convenient* opportunity. These letters show strongly the importance of a free interchange of facts and opinions through the columns of an agricultural newspaper.

POST FOR FENCES.

MR. FREAS:—Where it is necessary, as it generally is, to erect farm fences with posts, it is a matter of some importance to secure such materials as will be most durable. Oak, ash, chestnut, and cedar, are used in different States, and all, perhaps, have a higher degree of value than other kinds of native wood. Yet the natural durability, or power of resisting decomposition, which these woods possess, may be very materially increased by art. The practice of setting post in a reversed position, or with the tops in a direction contrary to that of growth, is highly recommended by some writers, and in many cases where the experiment has been made, its result appears very strongly to favor the theory upon which it is predicated. Still we are in possession of no reliable data which can be regarded as sufficient authority for an unqualified recommendation of the usage, and must await father developments, ere we accord to it the importance which its numerous, and in many instances intelligent advocates, assume for it.

But there can remain no doubt in the mind of any person, tolerably well informed on scientific subjects, that there are many ways in which the durability of wood, when placed beneath the soil, can be increased *economically*. Nature herself teaches us this fact. If, for instance, we desire to secure the durability of a fence post, we know that *charring* the portion exposed to the action of the soil, will enable it to resist decay. Charcoal, we have all of us seen, is almost indestructible when inhumed in wet or moist situations; and hence, if we create a coat of this substance around the sides, and over the lower end of a post, we infer that it will not speedily decay, or rot. Perhaps of all methods of resisting this contingency —always unpleasant, and often expensive to the farmer, charring, is alone the most economical and effectual. Posts that rarely last more than eight or ten years, may thus be made to endure twenty or thirty. This is not mere theoretical assertion; it has been actually and repeatedly demonstrated by experiment, and its truth could be corroborated by the testimony of hundreds. Kyanizing, or the process of first exhausting the air in the pores of wood, and then filling them with some mineral solution, is another method; but this is too expensive for most farmers. The wood so prepared, however, becomes almost as hard and indestructible as iron, resists friction, and is applied to uses where all the strength and impermeability, as well as rigidity of iron, is required. In a long run, it would, no doubt, richly remunerate one for the expense, but at present it can only be made available on works where large capitals are employed. The abundance of acid contained in the sap, is one of the principal causes of rot. Hence the steeping of it in solutions of potash, lime, or in strong ley, tends to promote its durability, as the alkalescent liquid destroys the acid, and frees the wood from its action.—*Germantown Telegraph.*

We copy the above for the purpose of endorsing its truths and objecting to such portions of the article as we conceive to be erroneous.

There can be no doubt that the charring of a portion of the posts to be inserted in the ground, materially increases their durability, as the antiseptic property of the charcoal formed must have such an effect. It is also true that reversing the posts relatively to the position of their growth will cause them to last for a greater length of time.

When the lower or butt end of a log is placed in water, the water will rise in the capillary tubes, and thus, by the combined effects of moisture and atmosphere, decay will ensue. When the position, however, of the log is reversed, and the upper end placed downward, the water will not rise, and hence the conditions for decay are not so readily present.

We should, however, differ widely from the writer of that article in his assertion that the introduction of salts, proper for the preservation of wood is too expensive for the use of the farmer; for many salts may be used with great profit, materially increasing the durability of the wood.

The cause of the decay of wood is principally due to the presence of vegetable albumen, and if this be coagulated by the use of such mineral salts as will render it insoluble, the ordinary conditions for decay will be arrested; thus, in a hogshead or or tub containing a dilute solution of corrosive sublimate, chloride of zinc, or sulphate of iron, posts may be immersed to the depth intended for insertion in the ground, and the vegetable albumen contained in the capillary tubes of the wood will be coagulated and rendered indestructible, and that too without material cost.

The most effective of these substances is corrosive sublimate, discovered by Mr. John Kyan, of England, the inventer of the Kyanizing process.

Some of the sleepers of the Amboy railroad were Kyanized, and after having been in use for more than twenty years, are still perfectly sound, while those not so treated, have required renewal.

In the Woolwich dockyard, in England, a number of posts were Kyanized more than thirty years ago, and still they are found to be in a perfect state of preservation, while those not so treated have required frequent renewal.

The chief decay of posts occurs at the immediate surface of the ground, where moisture and air more frequently meet and exercise their combined influence. A hole bored in a post immediately above the surface of the ground, and a small por-

tion of corrosive sublimate throw in this hole, and then closed by a tarred plug, tightly driven in, will preserve the post for a long time from decay. This hole should reach from the outside to the centre, and the slow solution of the corrosive sublimate from the slight amount of moisture sustained in the post, and renewed there by natural causes, will disseminate it througout the portion most likely to decay.

We cannot agree with the writer that the alkalies will preserve wood. It is true that small portions of lime may be used, because it is soon converted into carbonate of lime, by the carbonic acid of the atmosphere, and thus loses its causticity; but soda, potash, and the other alkalies will decompose woody fibre very rapidly, even after becoming carbonates. If the amount used would only be sufficient to neutralize acids in the wood, forming soluble salts with such acids, and then passing away by solution, the effect might not be so deleterious; but the slightest excess of alkali so applied would materially accelerate the decomposition of the work.—*Working Farmer.*

WHAT TIME SHALL WE CUT TIMBER?

Never in winter, but always in summer. It should be cut during the most rapid season of growth, and while that season is drawing towards a close. The same rule should be followed that skilful nurserymen observe in performing the operation of budding—that is, just as the *terminal bud* on each branch *begins* to form—as soon as it is first evident that the growth of the branch is about to terminate, but is *still in active progress.* Experienced tree-propagators have found that much earlier than this, the juices of the tree are in too thin or liquid a state to form a good adhesion between the bud and the peeled surface.—From the moment that the bark separates freely from the wood, these juices continue to thicken, until growth ceases altogether and the new wood is completely formed; and when this new wood is in the state of a thick paste or cement, then is the time that the bud will adhere most perfectly. This is the period when the bark may be peeled from a tree without destroying its vitality. And this is the time for cutting timber. Early in spring, the tree is full of sap, which is little else than pure water, and which has been gradually accumulating through winter by the absorption of the roots, with no outlet for its escape, as there is in summer through myriads of leaves. While the tree is thus replete with water, it is in the worst condition to be cut. But towards midsummer, when a portion of this water has passed off through the leaves, and the rest has been much thickened by conversion into material for wood, the case is very different; for while the watery sap promotes only decay, the thickened juices soon dry and harden, and assist in the preservation of the wood.

We have recently been furnished with a number of facts, in corroboration of this opinion, by Isaac Hathaway, of Farmington, Ontario county, N. Y., an old and enterprising settler, a close and extensive observer, and who has had much experience in connexion with saw-mills and timber erections. All his observations tend to show the great difference between winter and summer cut timber, and induce him to think that, cut at the best period, it will last under the average of circumstances three times as long as when felled in winter. In one instance, a fence, consisting of winter-cut materials, a part split into rails, and a portion in round poles, of beech, maple, ironwood, bass-wood, &c., had completely decayed in fifteen years, and none of it was even fit for firewood. In another case, a quantity of bass-wood rails were cut in summer, and split from the brown or heart portion of the tree. This was done about fifty years ago; thirty years afterwards the fence was quite sound, and even now some of the same rails remain undecayed, although much worn away by the weather. Winter saw-logs, left over one summer at the mill, are usually much decayed for several inches towards the interior; summer-cut logs, which have lain a like period, are always sound. He has cut hickory for axe-helves; if done in winter, decay soon commences, and the worm which loves this wood, often wholly destroys its value. Summer-cut, he has never known it to be attacked by the insect, and indeed it seems too hard for them to penetrate. He had occasion to examine several old frames of buildings, and in every instance where the period of cutting could be determined, the same striking difference in durabillity was conspicuous.

He related several experiments on the durability of posts, one of which is worthy of repetition.—In a gravelly soil, where the water never remains, a stone bottom a few inches thick was laid in the post-hole, on which the post was set, and was then surrounded with stone closely rammed in on every side. As a consequence, the water never remains long enough in contact with the post to soak its interior, as would be the case if damp earth passed its outer surface. Such posts consequently give promise of remaining sound, after some years' trial, at least twice the period of those simply packed in earth. He also finds that posts of what is termed the white cedar in western New-York, (the American abor-vitæ) last much longer when set green with the bark on, than if sawed and seasoned, which he attributes to the protection afforded by the durable bark, against the vicissitudes of rain and drouth, and the air and weather generally.*

Now that the season is approaching, best adapted for timber-cutting, as indicated in the preceding remarks, we hope those interested will at least satisfy themselves on the subject by a fair and careful trial.—*Country Gentleman.*

* In ordinary instances, however, above ground, the bark by preventing seasoning, only accelerates decay.

QUACK MEDICINES.

We unhesitatingly condemn as injurious, nine hundred and ninety-nine thousandths of all the patent medicines, mixtures and salves, and washes which are in use. In this country alone, more than *one hundred millions of dollars!* are every year paid for those nostrums, which are far worse than useless. While some of them may remove or modify one disease, they are sowing the fruitful seeds of a score of others.

A plain moderate diet of mixed food, with proper exercise, is the best safeguard against the attacks of disease. Abstinence is generally the best medicine. When the system has become dis-

arranged, give it time to right itself, not load its weakened vessels with new work in digesting and disposing of new materials which furnish the elements of irritating substances, requiring medicines to remove them from the system.—*Am. Agriculturist.*

EXTRACTS AND REPLIES.

Mr. Editor:—Permit me to inquire through the medium of your paper the best mode of preventing the maggot from eating onions? I have been very much troubled with them for two years past; cannot some of your subscribers inform us what will stop them? R. Harriman.

Henniker, May 30, 1854.

Remarks.—"J. M. T.," in the Maine *Farmer*, says the egg of the onion maggot is deposited in the skin of the seed, and that by soaking the seed in water, a little warmer than blood warm, the egg will be destroyed and the crop saved. He also recommends soaking the seed in weak copperas or saltpetre water.

Daniel Lighton, in the *Monthly Farmer* for 1852, says that sprinkling the young onions with tobacco water will destroy the egg, which is deposited on the top, snug to the growing onion. "H. S.," of Sagamore Farm, Rye, N. H., says he tried the tobacco water after the maggot had destroyed a portion of the crop, and completely arrested their progress.

WHERE SHALL I FARM IT?

Mr. Editor:—There was an inquiry made through your columns a few weeks ago, where a man could lay out a small amount of money in a farm in Massachusetts at the best advantage, say from $1000 to $2500? Please answer, and you will oblige many that are now thinking of going to farming. B. S. S.

Lawrence, May 29, 1854.

Remarks.—We are glad to hear that many are looking for farms, and it would be pleasant for us to be able to direct each and all to that El Dorado of human aspirations—*a good farm.* But we are, unfortunately, not able to answer the question propounded. Things are nearly equal, whether one is located near a city and a good market or remote from them; if near, the first cost of the farm more, and taxes and living every way is more expensive, than if a little remote. You must inquire, and take a stroll yourself through such towns as seem to offer the best advantages.

CRIBBING.

Mr. Editor:—I would inquire through your invaluable paper whether cribbing (so called from their gnawing the crib) in horses is considered a disease, and if so, is there any remedy that can be depended upon as a cure? W. Bugbee.

East Barnard, Vt., May 29, 1854.

Remarks.—We concur with the opinion below, from Dr. Dadd's Modern Horse Doctor:

The act of cribbing consists in grasping the crib, on a given point, with one or both jaws, at the same time uttering a laryngeal sound, resembling a grunt. A cribbing horse has generally been considered unsound, but we know not on what grounds; for we look upon a horse as sound so long as he can perform the duties of an ordinary horse without inconvenience or lameness; he may have defects, both as regards form and action; but such are not to be construed into unsoundness. It is a remarkable fact that very few cribbers fail to perform the duties required of them. They may, once in a while, have an attack of colic; but that is not due to cribbing, but to indigestion; still the popular belief is, that cribbing is either the result or cause of colic. The author's opinion is, that cribbing is a habit acquired or hereditary; that the sound or grunt originates in the vocal organs, from air admitted within them and expelled without entering the trachea, and in consequence of air supplied to them from the lungs during expiration. The grunt is evidently an expiatory murmur, and the air necessary for producing such is derived from one of these sources. Some contend that the animal swallows wind and thus creates flatulency, colic, &c.; but the idea is perfectly ridiculous. It is our firm belief, based upon a knowledge of the structure of the parts involved in the mechanism of respiration that neither man nor horse, by voluntary act, ever has power to swallow atmospheric air. The organs of respiration and deglutition differ so materially in their anatomical and physiological relations—have each a special function to perform—that it is impossible for one to perform the function of the other which should be the case if a horse actually swallows wind—atmospheric air—and then, as some others contend, regurgitated it. On these grounds, we question, therefore, the correctness of either theory. If horses possessed the power of eructating wind or gas from the stomach, we might expect in violent cases of flatulency, to notice its escape in this way, which the author has never yet been able to do. Crib-biting, therefore, being nothing but a habit or vice, can only be corrected by means and appliances which prevent the subject from indulging in it. In this view, all sorts of contrivances have been resorted to, and among them was one which was invented by Sir Peter Sawin. The space between the bottom of the hay-rack and the outer edge of the manger is boarded over, forming a steep, inclined plane, leaving in this way, no edge or point on which the horse can fix his jaw. Attached is a glass or slide opened only at meal-time. He uses common bar soap as a preventive, which is to be rubbed on the edge or outside of the crib, and renewed as often as necessary.

David Gay, of New London, N. H., says garget root, steeped in water, will cure sick pigs, if they are allowed to drink as much as they will of the liquor. It is a sure remedy for blind staggers, and costiveness, and excellent in other diseases. It is also good for cattle.

PRUNING EVERGREENS.

Levi Parker, of Wilmington, states that pines and other evergreen trees pruned in the latter part of May or early in June will not bleed or be

injured by the operation of pruning. He has tested them by many trials.

A GARDEN WEEDER.

I have a neat and handy little "weeder" for garden beds. It consists of two pieces of thin board about a foot long, 3 inches wide; these being placed 6 or 8 inches apart like the runners of a small sled, are fastened to a small piece of board at each end which comes to about ¾ inch above the bottom of the side pieces; at the top in the centre is another piece which serves as a handle. Upon the bottom are nailed 3 strips of sheet iron, ground to an edge, about ¾ inch wide, one at each end and one in the middle. When the ground is dry this is pushed along between the rows a little below the surface, and very neatly pulls up or cuts off the young weeds, and leaves them in the pathway. After a very little practice any one will be astonished to see how easily, thoroughly and quickly the work is done.

PLASTER—BUTTER WONT COME.

MR. BROWN:—Permit me to inquire through the medium of your valuable paper, what is the best mode of applying plaster to potatoes or corn. I have never used any, and thought that I should try some this year. My soil is a dry, sandy loam, which has been plowed deep this spring, and barnyard manure turned in under the turf. Also, what the reason is that the "butter won't come?" I have three cows which have been kept on dry hay with a few carrots this winter, and have had a plenty of salt, and it requires sometimes three hours churning to bring the butter with the cream kept and prepared in the usual manner and churned at a temperature of about 62° Fahrenheit. Cannot some of your intelligent subscribers inform us of the cause of this, and the remedy. J. B. PHILBRICK.

South Deerfield, N. H., 1854.

REMARKS.—Sow broadcast on a portion of the land, and on a another portion apply it to the hill or drills. In 1849, when the potato rot was at its height, we sowed about a pound of saltpetre and four pounds of plaster to the square rod, and had 235 bushels of excellent Chenango potatoes on an acre and a half of land.

THE POTATO ONION.

MR. BROWN:—I have recently seen an onion which is called the potato onion. It is described by Mr. ISHAM, of New Alstead, N. H., to be easily raised, profitable, and much milder than common sorts. He sets them out in hills, similar to seed onions; they grow in clusters of two or three large ones to six or eight in a hill. Mr. ISHAM sets out the smallest ones and he thinks they are the the most profitable. L. H.

Northfield, Mass., 1854.

REMARKS.—Probably the common "top onion," so called, raised a good deal at the South, and much more mild than our common onion.

TO DRY CHERRIES AND PLUMS.—Stone them, and half. Pack them in jars, strewing sugar between each layer

For the New England Farmer.

STATE OF VEGETATION AT THE CLOSE OF MAY.

Grass is abundant and luxuriant. We yesterday saw a field to which had been applied a sprinkling of the liquid collected at the stable, in which had been infused a quantity of guano, and we think we never saw a more marked effect, from the application of any fertilizing substance. The path of the application of the liquid, was as distinct, more than doubling the quantity, both in thickness and height, as would be that of the mower, casting his swath. This application was made about the first of the present month—not exceeding two hundred pounds of guano to the acre. If by applying $5 wortn of labor and material, a ton of hay can be created, it is not easy to specify a better investment. When facts like these are seen with our own eyes, here is an end of argument. Slur as much as you please, the application of *fancy manures*, the growing grass now waving in the breeze will outweigh all such slurs. On the same field is an illustration of the benefits arising from the application of the combinations of different fertilizers, but not so distinctly marked, as that of guano dissolved in urine.

The blossoms upon the apple trees still hold on, and give promise of a full harvest. Cherries are sparse, and poorly filled. Pears are falling from the trees. Peaches there are none. Corn planted since the 10th of May, is doing well; that which was planted earlier has a sickly appearance. An experienced farmer assures me, that he has grown as fine corn planted the last of May and first of June, as at any other period; and in confirmation of this, he is at this moment occupied in planting his corn, his ground having been waiting for the seed ten days or more. No benefit accrues from putting seed in the ground, before it is fitly prepared to receive it; "Once well done, is better than twice poorly." P.

May 31, 1854.

For the New England Farmer.

AUTUMNAL MARROW SQUASH.

MR. EDITOR:—The republication in your paper of this morning, of the facts stated by Mr. I. M. Ives, relating to the first introduction of the "autumnal marrow squash," *by seeds that came in a letter from Northampton*—brings to mind certain other facts, that came to my knowledge, in answer to inquiries suggested by Dr. Harris of Cambridge, on the same subject.

Without going through all the details, the substance of these were that Mrs. Tucker, of Salem, wife of Lewis Tucker, Esq., who formerly kept the Sun Tavern in Essex Street, furnished seeds of this squash to one E. Wellman Osborne, a gardener in Danvers, (now living at Ware, N. H.,) who grew them and carried them into the market at Salem, *several years*, before the time mentioned by Mr. Ives. I do not doubt, that Mr. Ives *supposed* what he stated to be true; nor do I doubt, that Mr. Osborne *knows* what he states to be true. The same thing was known to Mr. Daniel Buxton, Jr., and Mr. Abram C. Osborne—men of as much accuracy of observation and recollection in all matters of vegetable culture, as any others. I simply mention these things in illustration of

the propriety of the old adage, "that one story is good, until another is told."

Very truly yours,

Danvers, May 27, 1854. J. W. P.

SUMMER FEED FOR COWS AND PIGS.

Messrs. Editors:—I have an extra nice litter of 11 pigs, now nearly four months old. I wish to keep them all through the season, and fatten them. What can I raise most profitably for early and late feeding? I have clover growing finely, which I design partly for them. Is it better to fence a part of it, and turn them in, or keep them in the pen and mow the clover?

I have ten cows, a large portion of the milk of which is sold. I have not sufficient pasture unless I use for this purpose a field which for two years has been used as a meadow; and in this field and in the same enclosure, is an acre or more on which potatoes were planted last year. This acre I intended to have sowed very early to oats and grass, and then pasture the whole. But the season has been too wet to allow of this. Few persons in this region have sowed oats yet. Now can I hope to get any feed from the said acre this year? The loss of the use of this acre would not be great. Had I better pasture the remaining ten acres, till August or September and sow the one acre? Or would it be better to keep part of my cows in the stable and depend on soiling? The plan of soiling, exclusively, I intend to try as soon as I am prepared for it. I am only partially ready this season.

When is the best time for sowing ashes and plaster? Where guano was sowed on grass three weeks since, would it be of any advantage to sow ashes and plaster? W.

New Britain, Ct.

The cheapest food for pigs through the season, that we know of, is tender young clover, refuse or sour milk, and in autumn, the dropping fruit of an apple orchard. Practical farmers differ as to the propriety of cutting clover and soil. One of the most skilful farmers in Western New York thinks it decidedly best to shut up his pigs, and cut and feed the clover to them, alleging, from his own experience, that running about a pasture wastes more value of flesh than the cost of soiling. Others have given a different opinion, but these may not have fed their pigs regularly, nor provided them with the necessary comforts of a close pen. Certain breeds may also be better adapted to confinement than others. We should like the results of accurate experiments on this subject. A crop of peas may be found advantageous as food for hogs.

The great objection to soiling cattle, is the amount of labor in cutting, and conveying to them their food, watering, cleaning stables, providing, and securing their comfort at all times, a part of which is apt to be neglected in this country of scarce and high priced labor. Although several favorable reports have been made in favor of soiling, the fact that it has never been adopted for any length of time, successfully, by our best farmers, is against its utility, and we cannot recommend it as a general practice. Keeping *closely grazed* pastures, is very unprofitable, it is true; cutting high grass will afford twice as much feed from an acre; but the best way is to allow pastures to grow a foot high or more before turning in, and where portions of such pastures can be divided by hurdle fences, it is the best way.

It is commonly best to sow ashes on grass in autumn or winter, and plaster on clover early in spring. Experiment, only, can show where these measures will prove profitable. We do not perceive any advantage in sowing them after guano at this season, yet under particular circumstances, which experiment alone can decide, it may be successful.—*Ex.*

THE EFFECT OF OXYGEN IN ACCELERATING GERMINATION.

Mr. Humboldt discovered, in 1793, that simple metallic substances are unfavorable to germination of plants, and that their oxyde favor it in proporto their degree of oxydation. This discovery induced him to search for a substance with which oxygen might be so weakly combined as to be easily separated; and he made choice of oxygenated muriatic acid gas, mixed with water. Cresses (Leyidium Satirum) seed put into it showed germs in six hours; in water, thirty-two hours. The seeds exhibited an enormous quantity of air bubbles. These do not appear in the water till thirty or forty minutes.

These experiments, announced in Humboldt's Flora, and in his aphorisms on the chemical physiology of plants, have been repeated by others; they were made at a temperature of from 12 to 14 Reaumer (near 64° Fahrenheit.) In the summer of 1799, Humboldt began a new series of experiments, and found, that by joining the stimulus of caloric to that of oxygen, he was enabled still more to accelerate the progress of vegetation. He took the seeds of garden cress, peas, French beans, lettuce, and migonnette, equal quantities of which were thrown into pure water, and the oxygenated muriatic acid at a temperature of 88° Fahrenheit. Cresses exhibited germs in three hours in the oxygenated muriatic acid; while none in the water were seen till twenty-six hours. In the muriatic, nitric, or sulphuric acid, pure, or mixed with water, there was no germ at all.

These discoveries may one day be of great benefit in growing plants. Several distinguished philosophers have repeated them. Professor Phol, of Dresden, caused the seeds of a new kind of Euphorbia, (India rubber is one of them—Meigs,) taken from Bocconi's collection of dried plants, 110 or 120 years old, to germinate. Jacquin and Vandett Schott, at Vienna, tried all the old seeds of the Botanic Garden, twenty or thirty years old, every attempt to make them vegetate in the ground having failed, and he made the greater part of them vegetate; even the hardest seeds yielded to this agent. Very valuable plants are now growing in Vienna by this treatment. Humboldt made the seeds of Clusia Rosea, brought from the Bahamas by Boose, (and which had resisted every effort to make them grow in the ground,) vegetate by a new method of his—that is, by mixing the seeds with a paste made of the black oxyde of manganese, and pouring over it diluted muriatic acid. The vessel in which the mixture is made must be covered, but not tight; for if so, an explosion will occur. The temperature of the mixture must be about 95º of Fahrenheit.—*Journal de Physique.*

For the New England Farmer.

REARING SILK WORMS.

MR. EDITOR:—Having had some experience in rearing the silk worm, and reeling cocoons, I venture to reply to your fair correspondent's inquiry, "can the worms be raised and the cocoons sold to advantage?" I answer, I do not think they can. Our climate is too changeable for the health of the worms; the change from dry to wet, which we frequently have about the first of August, creates a disease of the most fatal kind. I have seen it spread with such fearful rapidity, that out of a hundred thousand worms ready to spin their cocoons, not two thousand lived to complete their task. If your correspondent's trees are the white mulberry, they are much better for the health of the worm than any other variety, but the expense of picking the leaves is such that unless labor be very cheap, it will not pay, even if the worms prove healthy. The expense of machinery for making sewing silk would be considerable, a good twisting machine, if new, would, I think, cost at least two hundred dollars. The most profit would be to reel the cocoons and sell the raw silk, for which there is a ready market in this vicinity. Any mechanic can make a reeling machine in one or two days, if provided with a description of one.

I presume eggs can be procured in Connecticut, but I cannot refer to any individual who has them. Such further information as I possess will be freely given, if desired. E. HERSEY.

Hingham, Mass.

For the New England Farmer.

WHAT A GARDEN SHOULD BE.

Having discussed Gardens at some length under their ornamental aspect, lest the accusation be brought that the useful has been forgotten, this article shall be devoted to the special consideration of the Kitchen Garden.

We are wrongly apt to associate with the word Garden, a corner of land filled with weeds and flowers, and another corner marked into rows, by a regiment of White Birch, bean poles, and pea bushes, with an intersprinkling of corn stalks, some squashes—vines, and a great deal of rubbish, where, as the country people say, the "Garden Sauce" is grown. Now, as the object of this article is to have a little talk about this very "Garden Sauce," let us see if we need to abandon our much loved vegetables, in improving our homestead, and making its surface, a little more pleasing to the eye.

Rather than abandon them, it would be better to lose much that would be pleasing of the purely ornamental, for in the country, people are very dependent upon the vegetables of their own growing, as markets are rare, and but ill supplied. Were there no other argument for their culture but this, it, alone, would be enough, but there is a still stronger one: few are aware how conducive to health the summer vegetables are: all authorities agree in recommending their free use; and the danger of cholera arises, not from the bad effects of good, fresh vegetables, so much as from the stale and wilted denizens of the market. It is always a matter of very great surprise to city residents, to find so little attention paid to the growth of anything but potatoes, corn, and a few beans, in the country. Leaving bricks and dust for green lanes and trees, they revel in the fresh air, and with a keen appetite, eargerly await the promised dinner, imagining all the dainties of the vegetable world they have heard of, strawberries and cream, green peas, sweet corn, tomatoes, &c. When to their surprise they see the kitchen maid returning from the neighbor's with a bought, or borrowed pint of milk, and meet with the excuse from the matron, that "she regrets the lack of asparagus, lettuce, &c., but the butcher didn't bring any, and its so hard to get vegetables in the country." The difficulty lies in *the dread of trouble, not in the trouble itself:* do not be so afraid, good sir, after you have come home from the day's work, to drop a few peas, or tomatoes or lettuce seeds! and do not let your imagination dwell, upon the hot days' weedings by and bye.

It is a great shame, that it should be universally true, that it is no where so difficult to get vegetables as in the country. It will not do for you to say, anytime will answer for that work. Anytime is no time. Believe me, the ten minutes of aggravation a day, your wife will feel when the dinner presents no variety; of disappointment you will experience when you find your wife is not a fairy, and cannot produce baked beans and potato in any other shape than baked beans and potato, and is unable to alter the everlasting veal and bread, into green peas and sweet corn,—is much more, than the mere trouble of weeding and sowing the seed. But weight enough has not been given to the healthfulness of vegetables: we are too essentially a meat-eating race; we do not know how to make the most of things; and hundreds of poor families might enjoy a luxurious variety, would they but use the bounties of the vegetable world. The English and European peasantry, live entirely on a vegetable diet, and yet are quite as healthy as we are, and hundreds and thousands of our poor people have more sumptuous meat fare, than the majority of the inhabitants of the old world. Lay off, then, in your garden, a bit of land; plant a few of the different vegetables, just enough to supply yourself, and do not make that fatal mistake of getting so much land under culture.

People are inclined to go to work too largely, and plant enough of a few things, to supply several families, and then to allow the quantity to take the place of variety. It is very easy to calculate how much you will want, and when you have decided do not plant all at once, but have a succession; plant a row of peas and corn to-day, another in a week, and another the third week; then have a few hills of squashes, summer and winter, and remember it is no economy to cover the land with winter squashes to the exclusion of summer vegetables;—it is robbing Peter to pay Paul, and no gain; then a few hills of melons, some distance from the squashes, to prevent impregnation of seed. Have some ten tomato plants, a little patch, ten feet square, of carrots, another of parsnips, a few hills of rhubarb, or pie plant, a small square, say 20x20, of asparagus, and dotted in, a few pepper plants, some cucumbers, and in a corner by themselves, one hundred raspberry vines with two or three strawberry beds, 4x20 feet. On the edge of the walk, set currants and gooseberries, and a little farther in, dwarf pears. By a judicious selection of place, you can get two or three crops a year from some of the land; the par-

snips will be eaten before time of planting, when their place may be taken by radishes, and they be followed by peas, and they by a few turnips. To the other early peas, the parsnips may follow: on the corn land you can grow squashes, and *vice versa*.

Half an acre arranged in this way, will give all that a family of six persons can possibly need, but be sure to remember at starting, that you want no more land under culture, than you can keep free from weeds, and to plant no greater quantity than you can use yourself. Where the most of the surface is under culture, and the ornamental is entirely excluded, there is danger of a too great spirit of utility; therefore do not forget that we must feed the mind and soul as well as the body, but pay a due regard to both. It is very desirable, however, to keep each division by itself, and not mix them together heterogeneously. No one wishes to see gilly-flowers and cabbages side by side, because they are of the same family; let the two divisions be just as separate as parlor and kitchen, but do not omit either any more than one of these two rooms from your house. It may seem rather late to make this appeal for the vegetables, but there is yet time for tomatoes, late peas, sweet corn, carrots, parsnips, and cabbages, and when you read over this list, recall the savory dishes they may be compounded into, and be willing to give your wife the assistance you can, in the culinary department. Lest the succession of the vegetables should be forgotten, an enumeration may be of service; first parsnips, then asparagus, rhubarb, radishes, lettuce, dandelions, peas, beans, cucumbers, corn, squashes, tomatoes, carrots, turnips, cabbages and potatoes. For fruits, strawberries, raspberries, currants, cherries, melons, pears, peaches and apples,—all within the reach of every owner of one hundred and fifty feet square of land.

R. Morris Copeland.

Roxbury, June 3, 1854.

PRODUCTION OF BUDS AND SEEDS.

In considering the production of vegetable buds and seeds, of some insects, of more perfect animals, says Erasmus Darwin in the *Zoonomia*, the modes of generation may be divided into solitary and sexual. The first consists in solitary, lateral generation, as in the reproduction of weeds and bulbs of vegetables, and of the young of the polypus, and of the *hydra stentorid*, or of the solitary internal generation, as of the *aphis*, *vine fretter*, *actenia*, *sea anemone tcia*, *tape worm* and *volvex*; all of which are properly a viviparous progeny, as they are produced by spawns, or eggs, or seeds. In these modes it is believed that fibrils with formative attitudes, and molecules with formative propensities, produced by, or detached from, various essential parts of their respective systems, float in the vegetable or insect blood. These may be termed animalized particles of primary combination, consisting of a solid particle adjoined to a peculiar appetancy or propensity; which latter may be termed its *etherial part*; as magnetism or electricity may be added to iron or to other inanimate bodies.

The various ways in which plants are propagated, opens a wide field of observation to the student. The various phenomena involved in the evolution of the almost innumerable species of vegetable productions, and the singular and astonishing wisdom with which means are adapted to ends, will afford ample scope for the investigation of the most acuminated and persevering intellect, and is a field, the treasures of which human genius and perseverance can never entirely exhaust.

WHAT A WHOLE CROP CARRIES OFF.

Below we give another chapter from Johnston's "Elements of Agricultural Chemistry and Geology," which we think will be found interesting to every reader, whether he cultivates the soil or not. There are so few technical terms employed, and the author's meaning is made so clear by the use of forcible and perspicuous language, that we always take up the work with a new pleasure. And so will others.

The importance of the inorganic matter contained in living vegetables, or in vegetable substances when reaped and dry, will appear more distinctly if we consider the actual quantity carried off from the soil in the series of crop.

In a four years' course of cropping, in which the crops gathered amounted per acre to—

1st year, Turnips, 20 tons of bulbs and 6½ tons of tops.
2d year, Barley, 40 bushels of 63 lbs. each, and 1 ton of straw.
3d year, Clover and Rye-Grass, 1½ ton of each in hay.
4th year, Wheat, 25 bushels of 60 lbs., and 1¼ tons of straw.

1°. The quantity of inorganic matter carried off in the four crops, supposing none of them to be eaten on the land, amounts to about—

Potash	317 lbs.	Sulphuric acid	108 lbs.
Soda	54 "	Phosphoric acid	116 "
Lime	193 "	Chlorine	70 "
Magnesia	55 "		
Oxide of iron	15 "	Total	1284 "
Silica	356 "		

or in all about 11 cwt.; of which gross weight the different substances form unlike proportions.

2°. As till clearer view of these quantities will be obtained by a consideration of the fact, that if we carry off the entire produce, and add none of it again in the shape of manure, we must or ought, in its stead, if the land is to be restored to its original condition, to add to each acre every four years—

Dry pearl-ash	465 lbs.
Common bone-dust	552 "
Epsom salts	326 "
Common salt	116 "
Quick-lime	70 "
Total	1529 lbs.

Several observations suggest themselves from a consideration of the above statements.

First, That if this inorganic matter be really necessary to the plant, the gradual and constant removal of it from the land ought, by and by, to make the soil poorer in this part of the food of plants.

Second, That the more of the crops which grow upon the land we return to it again in the form of manure, the less will this deterioration be perceptible.

Third, That as many of these inorganic substances—the potash, soda, &c.,—are readily soluble in water, the liquid manure of the farmyard, so often allowed to run to waste, must carry with it to the rivers much of the saline matter that ought to be returned to the land.

Fourth, If the rains also are allowed to run over and wash the surface of the soil, they will gradually deprive it of those soluble saline substances which appear to be so necessary to the growth of plants. Hence one important benefit of a system of drainage so perfect as to allow the rains to sink into the soil where they fall, and thus to carry down, instead of away, what they naturally dissolve.

And, *lastly*, That the utility, and often indispensable necessity, of certain artificial manures—though, in some districts, perhaps arising from the natural poverty of the land in some of the mineral substances which plants require—is most frequently owing to a want of acquaintance with the facts above stated, and to the long-continued neglect and waste which has been the natural consequence.

In certain districts, the soil and subsoil contain within themselves an almost unfailing supply of some of these inorganic or mineral substances, so that the waste of them is long in being felt; in others, again, the land contains less, and therefore becomes sooner exhausted. This latter class of soils requires a more careful, and usually a more expensive mode of cultivation than the first; but both will become at length alike unproductive, if that which is yearly taken from the soil is not in some form or other restored to it.

One thing is of essential importance to be remembered by the practical farmer—that the deterioration of land is often an exceedingly slow process. In the hands of successive generations, a field may so imperceptibly become less valuable, that a century may elapse before the change prove such as to make a sensible diminution in the valued rental. Such slow changes, however, have been seldom recorded; and hence the practical man is occasionally led to despise the clearest theoretical principles, because he has not happened to see them verified in his own limited experience; and to neglect, therefore, the suggestions and the wise precautions which these principles lay before him.

The special agricultural history of known tracts of land of different qualities, showing how they had been cropped and tilled, and the average produce in grain, hay, and stock every five years, during an entire century, would afford invaluable materials both to theoretical and to practical agriculture.

General illustrations of this sure though slow decay may be met with in the agricultural history of almost every country. In none, perhaps, are they more striking than in the older slave States of North America. Maryland, Virginia and North Carolina—once rich and fertile—by a long-continued system of forced and exhausting culture, have become unproductive in many places, and vast tracts have been abandoned to apparently hopeless sterility. Such lands it is possible to reclaim, but at what an expense of time, labor, manure, and skilful management! It is to be hoped that the newer States will not thus sacrifice their future power and prospects to present and temporary wealth—that the fine lands of Ohio, Kentucky, and the Prairie states, which now yield Indian corn and wheat, crop after crop, without intermission and without manure, will not be so cropped till their strength and substance is gone, but that a better conducted and more skilful husbandry will continue, *without diminishing the present crops*, to secure a permanent fertility to that naturally rich and productive country.

PRACTICAL DEDUCTIONS TO BE DRAWN FROM A KNOWLEDGE OF THE INORGANIC CONSTITUENTS OF PLANTS.

Several important practical deductions are to be drawn from what has been stated in regard to the inorganic constituents of plants.

1°. *Why one crop may grow well where another fails.*—Suppose, for example, a crop to require a peculiarly large supply of potash—it may grow well if the soil abound in potash; but if the soil be deficient in potash and abound in lime, then this crop may scarcely grow at all upon it, while another crop to which lime is especially necessary may grow luxuriantly.

2°. *Why mixed crops grow well together.*—If two crops of unlike kinds be sown together, their roots suck in the inorganic substances in different proportions—the one more potash and phosphoric acid perhaps—the other more lime, magnesia, or silica. They thus interfere less with each other than plants of the same kind do—which require the same kinds of food in nearly the same proportions.

Or the two kinds of crop grow with different degrees of rapidity, or at different periods of the year; and thus, while the roots of the one are busy drawing in supplies of inorganic nourishment, those of the other are comparatively idle; and thus the soil is able abundantly to supply the wants of each as its time of need arrives.

3°. *Why the same crop grows better on the same soil after long intervals.*—If each crop demands special substances, or these substances in quantities peculiar to itself, or in some peculiar state of combination, the chances that the soil will be able to supply them are greater, the more distant the intervals at which the same crop is grown upon it. Other crops do not demand the same substances, or in the same proportions; and thus they may gradually accumulate on the soil till it becomes especially favorable to the particular crop we wish to grow.

4°. *Why a rotation crop is necessary.*—Suppose the soil to contain a certain average supply of all those inorganic substances which plants require and that the same corn crop is grown upon it for a long series of years—this crop will carry off some of these substances in larger proportion than others, so that year by year the quantity of those which are thus chiefly carried off will become relatively less. Thus at length the soil, for want of these special substances, will become unable to bear a corn crop at all, though it may still contain a large store of the other inorganic substances which the corn crop does not specially exhaust. Suppose bean or turnip crops raised in like manner for a succession of years, they would exhaust the soil of a different set of substances till it became unable to grow them profitably, though still rich perhaps in those things which the corn crop especially demands.

But grow these crops alternately, then the one crop will draw especially upon one class of sub-

stances, the other crop upon another; and thus much larger crops of each will be reaped from the same soil, and for a much longer period of time.

On this principle the benefit of a rotation of crops in an important degree depends.

5°. *What is meant by exhaustion.*—Thus, exhaustion may either be *general*, arising from the gradual carrying off of all the kinds of food on which plants live—or special, arising from the want of one or more of those substances which the crops that have been long grown upon it have specially required.

To repair the former kind of exhaustion, an addition of many things to the soil may be necessary; —to repair the latter, it may be sufficient to add a needful supply of one or more things only. In showing how this may be most efficiently and most economically done, chemistry will be of the most essential service to the practical man. Before entering further upon this point, however, it will be necessary to study also the nature of the soil in which plants grow.

CATERPILLARS.

These are a great pest to farmers, though comparatively harmless in a city. The eggs from which they are hatched are placed around the ends of the branches, forming a wide ring consisting of three or four hundred eggs in the form of short cylinders, standing on their ends close together, and covered with a thick coast of brownish water-proof varnish. The caterpillars come forth with the unfolding the leaves of the apple and cherry trees in the latter part of April or the beginning of May. The first signs of their activity appear in the formation of little angular webs between the fork of the branches a little below the cluster of eggs.

Under the shelter of these tents the caterpillars remain concealed at all times when not engaged in eating. In crawling from twig to twig, they spin, from their mouths, a slender silken thread, which is a clue to conduct them back to their tents. They gradually enlarge their nests until they acquire a diameter of eight or ten inches. They come out together about 9 A. M. to eat, and all retire at once when their regular meals are finished. During bad weather, however, they fast, and do not venture from their shelter.

From the first to the middle of June they begin to leave the trees, wander about a while, and finally get into some cuvier or other place of shelter, and make their cocoons. From fourteen to seventeen days thereafter, the insect bursts its chrysalis skin, forces its way into the softened end of the cocoon and appears in the miller form. It is then of nasty or reddish brown color, and expands from an inch and a quarter to an inch and a half. These millers appear in great numbers in July, flying about and often entering houses by night. At this time they lay their eggs, preferring the wild cherry, and next the apple.

Where proper attention is not paid to the destruction of them, they almost entirely strip the apple and cherry trees of their foliage during the seven weeks of their life in their caterpillar form. The trees, where they are suffered to breed for a succession of years, become prematurely old, in consequence of their efforts to repair, at an unseasonable time, the loss of their foliage, and are rendered unfruitful and worse than useless.

How are they to be destroyed?

1st. During the winter and spring collect and destroy the eggs. They are then readily discovered, and may all be removed with little trouble.

2d. When the destruction of the eggs has been neglected or overlooked, and the caterpillars are building their nests, prepare some whale or train oil, the stronger and more rancid the better. Then take a light pole of convenient length, with a swab upon the end, and rub the oil into the nests. It is well to rub it also upon the limbs just above and below the nests. This operation is best performed some misty or foggy morning before the worms leave their nests. I know by abundant experience that it will entirely destroy every nest upon which it is performed, and every caterpillar in the nest.

3d. When the time for this process is past, and the millers begin to appear in July, hang upon the trees wide-mouthed bottles one-third filled with two parts of vinegar and one of molasses. In this way myriads may be caught.

In my small garden I made this experiment last season with twenty-four bottles hung upon the fence. In seven days from June 16th I caught forty-two quarts of millers and flies, but the amount gradually decreased to about half a pint a day. I then placed the bottles in my large pear trees, and the number taken was greatly increased. The whole amount thus caught during the season was four bushels and twelve quarts.

May 29, 1854. CHARLES ROBINSON.
New Haven Palladium.

For the New England Farmer.

THE FARMER'S HOME.

MR. EDITOR:—Having during the past year travelled through a portion of this, and some of the adjoining New England States, I have had an opportunity to observe many New England farmers' homes.

While there are some which present a pleasing and inviting aspect, there are many so cheerless and uninviting, that they seem to send a chill through one's whole frame. Buildings are located without any regard to appearance, and every ornamental tree and shrub in their vicinity has fallen before the woodman's axe without a thought except how many potatoes could be grown on the land; in front of the dwelling, where should be gravelled walks, graceful shade trees, beautiful shrubs, carefully trained climbing vines and pretty flowers, are geese and pigs, or bleating calves and noisy ducks whose utility seems to consist in giving the inmates of the house timely notice of the approach of a stranger, who easily judges of the number of acres the farmer possesses, by the size of the wood-pile and the number of broken wheels, carts, sleds, plows, and other worn-out farming implements which flank the yard on either side. Should the stranger, before entering the house, desire to learn more of the character of the person he is about to visit, he has but to cast his eye into the adjoining shed, one end of which is used as a tool house; if plows, harrows, and other implements are in one confused mass, and their appearance indicates that the hen-roost is above, he may safely conclude that if the boys have not already gone to the city with the idea that farming is pretty dirty business, it is only because they are not yet old enough to carry out their own desires

The man who can take hold of the handles of such plows as I have seen, *and not look back*, must be one whose mind is so absorbed in the word *utility* that he thinks of nothing but the fattening of his land as each turning furrow scrapes guano from his plow, not even perceiving the increase of his own weight, by an external application of the same material upon his hands.

I do not believe man was placed here to spend his whole time in procuring gold with which to enlarge his farm, for what profiteth it a man if he gain the whole township and lose his own happiness? The farmer who would keep his children at home, should neglect nothing within his means to make his home attractive. Let neatness and order manifest itself in every department; let him beautify what he already possesses, rather than enlarge his farm, and thus make his home so attractive that his children no longer seek the artificial beauties of the city, but become satisfied with the purer and superior attractions of their rural home. There is perhaps no class better able to make their homes attractive than the farmer, but in his eagerness to acquire more territory he often fails to perceive it.

I could name individuals who own hundreds of acres of land, but cannot spare a rod for a flower-garden for their daughters, or an acre for an orchard for their sons, and yet lament that their daughters yearn to be tending the loom of some manufacturing company, and their sons the counter of some city merchant.

I cannot but hope that the time is fast approaching when the farmer will be as eager to satisfy the wants of his family, as he now is those of a stranger, and thus make his home a happy one, and his children contented. E. HERSEY.

Hingham, Mass.

For the New England Farmer.

WINTER IN MISSISSIPPI.

A winter in Mississippi has none of those exhilarating accompaniments which characterize a New England winter; no merry sleigh-bells, no skating, no coasting. One never sees here, mother earth, covered with her pure, snowy mantle; or the trees hung with glittering crystals. Yet, a winter in Mississippi is not without its charms. If it has not a coronet of diamonds, it wears a wreath of roses. Winter in Mississippi is like life itself, a strange mingling of sunshine, clouds and rain. Now, the genial sun warms into life and beauty the slumbering rose-buds, and the gardens are blooming with hyacinths, narcissus, and other varieties of the bulbous family. The forests, too, are interspersed with evergreens; the dark, rich magnolia, with its lustrous foliage glistening in the sunshine; the brighter, more cheerful holly, with its coral berries, the hopea, water-oak, with a variety of others, peculiar to this latitude; so that, although many of the trees shed their leaves in autumn, the forests never wear that aspect of desolation, that they do in colder climates, during the winter months. Then, too, there are miles, and miles of hedge, made of the beautiful, evergreen, Cherokee rose. One of the most pleasing features of a southern landscape in February, is the yellow jessamine, its evergreen foliage, contrasting beautifully, with its profusion of golden blossoms; perfuming the air with a delicious fragrance resembling heliotrope. Each particular flower, viewed separately, is not strikingly beautiful; but the vine itself, twining around the fence corners, or hanging in graceful festoons from the smaller trees, laden with sweet blossoms, has a charming effect. The variety of the feathered tribe adds another beauty to our winter scene. Besides the gay red-bird, mocking-bird, and other birds peculiar to the South, we have some dear little robins from good old Massachusetts. Who knows but they are the very ones that build their nest, every year, in the old elm, that shades our own "Beloved Home!"

But all is not sunshine in Mississippi. Winter has its clouds and storms. The to-day, so bright and beautiful, is succeeded by a dark to-morrow. The pattering of the rain-drops is the first sound that greets the ear in the morning, and it lulls you to slumber at night. Day after day, the rain comes down. Then the weather gradually becomes colder, and colder, and at last the clouds are dissipated, and the glorious sun shines forth in all his splendor. Then follow three white frosts, then a few days of warmth and sunshine, then a rain. Winter does not put a stop to the work on a plantation. The negroes are busy, plowing, making fences, and clearing land, to be in readiness to plant the corn and cotton in the spring. Christmas comes once a year, and is observed with festivities corresponding to Thanksgiving in New England. There is a whole week of holidays, which the servants enjoy vastly, in a succession of parties and visiting. There is a fiddler on almost every plantation, and music, and dancing are enjoyed with as keen a relish in the cabin by torch-light, as in the brilliantly illuminated ball-room.

Houses in Mississippi are not built so much in reference to comfort in winter, as in summer, and stoves are regarded as abominations, not to be tolerated.

In a cold day, a cheerful fire is blazing on the hearth, but there is such a mania for fresh air, that the doors and windows must be wide open, so there is no danger of being too warm. Happily, however, the very cold days are few, and far between.

Of the amusements, and pleasures of winter on a plantation, but little can be said. The gentlemen are great huntsmen, and unrivalled equestrians, and the ladies, too, are fond of riding on horseback. But there are no lyceums, or concerts, so that we are dependent on our own resources for enjoyment. M. E. S.

Kellertown, Miss., May, 1854.

REMARKS.—We are glad that the intelligent daughters of Massachusetts still retain an interest in the columns they were in the habit of perusing before becoming citizens of the West. We shall be glad to hear from "M. E. S." again.

TO CORRESPONDENTS.—A "FARMER" will find our views briefly expressed in another part of the paper, in relation to the subject upon which he writes. Perhaps he has written under some misunderstanding of the article which he criticises. Several inquiries and valuable communications are on hand, which shall receive attention.

COST OF MANURE.

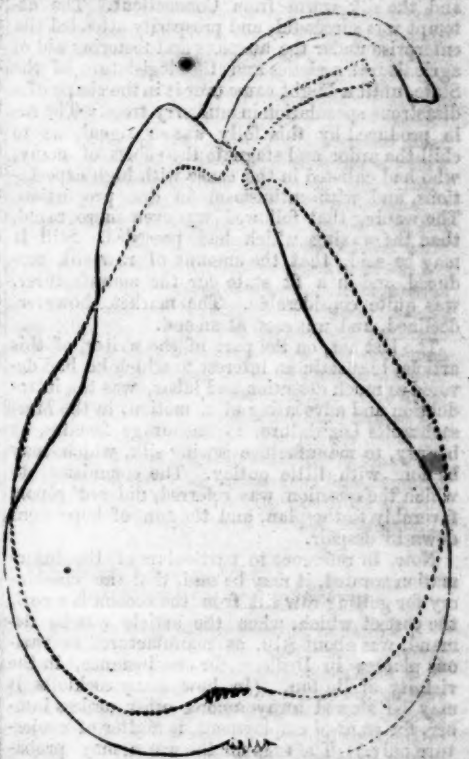
How many farmers continue to work their farms without profit, for the want of a sufficient amount of fertilizers, and many, too, whose income from other sources than their farms, enables them every year to loan an excess on mortgage. Nine-tenths of their time and energies are spent in tilling the poor and worthless farm, to prevent its running them in debt, and still, they are unwilling to invest a single dollar in the purchase of manure, to be refunded with double interest in a single season.

The question simply should be, will a dollar's worth of manure produce more than 106 cents worth of corn beyond the expense of producing it, and beyond the natural crop of the land. We say that an extra dollar properly invested in manures, will produce an excess crop of five dollars worth of corn in a single year, and, in many cases, a much larger ratio of increase, besides leaving the land worth nearly, or all the cost of manure, better for future crops. What would be said of the merchant who should loan so much of his capital on bond and mortgage, that he had not sufficient means to keep the necessary stock of goods to supply his customers? And why should the farmer loan his money to others at six per cent. per annum, when he could earn a profit, in addition to the interest, by using it himself? When a farmer's income is truly in excess of his farm, then he is consulting his best interest by investing his money where it may be used by others for his benefit; but until his own business is properly cared for, he is wrong to part with the means necessary to its success.

Many a farmer now worth $1000 beyond his farm was worth the same on arriving of age, and might have rendered his farm capable of producing a similar sum every year in excess of his wants, if, during the first year of his business, he had placed the $1000 in his soil in the shape of manure. Nor is this truth confined to the wealthy farmer, for many who now work 100 acres of land and remain poor, might become comparatively rich in a few years, by using the same amount of manure on 50 acres which they now use on 100. So long as further additions of manure will increase the product beyond cost, the farmer should continue to increase the quantity used; and if he cannot do so by any other means, he should reduce the quantity of land tilled.—*Working Farmer.*

THE BEURRE BOSC PEAR.

Elliot, in his new work on Fruit, says this pear should have a place in the smallest collection. Downing goes farther, and gives it unqualified praise. He says it is large, handsome, a regular bearer, always perfect, and of the highest flavor. It bears singly, and not in clusters, looking as if thinned on the tree, whence it is always of fine size. It was raised in 1807 by Van Mons, and named Calebasse Bosc, in honor of M. Bosc, a distinguished Belgian cultivator. Having also been received at the garden of the Horticultural Society of London, under the name of Beurre Bosc, Mr. Thompson thought it best to retain this name, as less likely to lead to a confusion with the Calebasse, a distinct fruit. The tree grows vigorously; shoots long, brownish olive. Fruit large; pyriform, a little uneven, tapering long and gradually into the stalk. Skin pretty smooth, dark yellow, a good deal covered with streaks and dots of cinnamon russet, and slightly touched with red on one side. Stalk one or two inches long, rather slender, curved. Calyx short, set in a very shallow basin. Flesh white, melting very buttery, with a rich delicious, and slightly perfumed flavor. Ripens gradually, from the last of September to the last of October.



THE ANDREWS PEAR.

This pear (*dotted outline*) is stated by Downing to be a favorite native seedling. It is found in the neighborhood of Dorchester, and first introduced to notice by a gentleman of Boston, whose name it bears. It has, for the last 15 years, been one of the most popular fruits. It is of most excellent flavor, a certain and regular bearer, even while young, and the tree which is very hardy, never suffers from blight. Fruit rather large, pyriform, one sided. Skin smooth, and rather thick, pale yellowish green, with a dull red cheek, and a few scattered dots. Stalk about an inch and a quarter long, curved, set in a very shallow, blunt depression, or often without depression. Calyx open, placed in a small basin. Flesh greenish-white, full of juice, melting, with a fine vinous flavor. Early in September. Shoots diverging, light olive.

For the New England Farmer.

SILK CULTURE.

MR. EDITOR:—In the *Farmer* of May 27th, an inquiry on this subject is presented by a "New Hampshire Girl."

Somewhat more than twenty years have elapsed since a movement was commenced, in which the writer of this article took a zealous and rather prominent part, to introduce the raising of silk into Massachusetts. Considerable expense was incurred to colonize the mulberry tree and the silk worm from Connecticut. The attempt was successful, and prosperity attended the enterprise under the auspices and fostering aid of agricultural societies and the legislature of the State, until a blight came over it in the shape of a disastrous speculation in mulberry trees. The ruin produced by this folly was so signal, as to chill the ardor and stagnate the efforts of many, who had enlisted in the cause with high expectations, and with enthusiasm in due proportion. The waning that followed was even more rapid, than the waxing which had preceded. Still it may be said, that the amount of raw silk produced, and in a fit state for the manufacturer, was quite considerable. The market, however, declined, and was soon at an end.

The last act, on the part of the writer of this article, to sustain an interest to which he had devoted so much attention and labor, was the introduction and advocating of a motion, in the Massachusetts Legislature, to encourage females, by bounty, to manufacture sewing silk, which may be done with little outlay. The committee, to which the question was referred, did not report favorably to the plan, and the sun of hope went down in despair.

Now, in reference to particulars of the information wanted, it may be said, that the machinery for getting raw silk from the cocoon is a reel, the cost of which, when the article was in demand, was about $10, as manufactured in various places; in Dedham, for one instance, in the vicinity of Boston. (In how many cocklofts it may be stowed away among other useless lumber, for want of employment, is matter of conjecture only.) The eggs for the worm may, probably, be obtained any where in the region of silk-growing, and Mansfield in Connecticut, is as likely a place as any to be in a condition of perseverance, as regards this kind of husbandry.

Should any one resolve on making a trial of the business, directions how to proceed may be gathered, unquestionably, from the archives of the State, and the *New England Farmer* also, from within the limits of that period especially, when Rev. Henry Colman was Agricultural Commissioner, and likewise editor of the *New England Farmer*.

If I could be of any service to the "New Hampshire Girl," in the way of offering suggestions, I might address her in a strain something like the following: "Dear Miss, if you have any thing of the spirit, the ardor, the indomitable resolution of Joan of Arc, and can get access to comrades, in any considerable number, of like temperament, sentiments and feelings, disposed to embark with you in a scheme so doubtful, yet so laudable, bring them together in convention, (female conventions you know, are as common as daisies in the spring,) and make formal representation, by resolution, to the conscript fathers, (which in modern dialect means young men, mere striplings,) of the Granite State in legislative halls assembled, that the daughters of the Commonwealth are not averse to sharing in the industry necessary to the common weal, and would gladly be put in the way of earning and even producing, some portion, at least, of the silks indispensable to the adorning of their persons. They, therefore, humbly petision your honorable body to adopt measures for retaining at home a moiety of the immense sums of money sent abroad for silk goods, and let it be so invested as to give employment to female hands, and shield them from poverty, vice and degradation. If this expedient fails, try the agricultural societies, and ask them, if it will not profit the country as much, to have our silks produced at home, as to have our soil occupied with other fancy articles, which cannot be transplanted from distant regions but at great expense. Let cattle, hogs and hens, which eat up so much of our farming wealth to gratify a taste for imported stock, remain where they are engendered, and let the industry which is wanted to give scope to unemployed hands and to furnish us with home enjoyments, without going far away to obtain them, have the benefit of the outlay."

The residue of the argument I have in embryo. J. F.

Charlemont, June 8, 1854.

INFLUENCE OF MACHINERY ON CIVILIZATION.

The annexed eloquent extract is from the "*Philadelphia Daily Ledger*,"—a paper always able and uniformly correct:—

"The influence of these reforms on civilization cannot be estimated too highly. The old prejudice against machinery, which never had any hold on men of real intelligence, is now disappearing even from the minds of the most ignorant. Everywhere the great truth is being acknowledged, that the influence of machinery is to elevate the condition of the human race, by substituting skilled labor and directing talent for mere executive work. In other words, men are elevated, so far forth, from machines to makers and controllers of machines. The higher qualities of their nature are being called into exercise. Instead of going the same unvaried round of labor for generation after generation, like a blind horse forever travelling the narrow circuit of a mill, they are throwing the burden of all mere mechanical work on machinery, subjecting the dull and inanimate forces of nature to their will, and making iron and steel submissive agents. If the reforms, already made in this direction, afford any criterion for the future, the time will come eventually, when nearly all that is irksome in labor will be avoided, and then that part of the curse pronounced on Adam at least be alleviated.

Yet this aspect of the influence of machinery and civilization, though the most important, is precisely the one least regarded. It is far more common to hear the cheapening effects of machinery extolled than to have these enfranchising and elevating influences pointed out. We do not deny that the placing of cottage goods with the reach of the poorest, has materially improved the physi-

cal condition of the human race, and therefore indirectly refined and enlightened mankind. But this is only the ultimate, not the proximate result. Nor is it without alloy. And to a certain extent the effect of machinery in this direction is enervating and sensualizing. It advances civilization in its physical aspect, but not in its moral, intellectual, and religious ones. It fosters less the spiritual and mrntal part of humanity than that baser part which is 'of the earth, earthy.' But machinery, regarded as a means to banish man's slavery to toil, by substituting brain-work for the labor of the hand, is the high road to that fuller and more perfect development of society, which poets have painted, philosophers predicted, and revelation, it is believed by many, expressly promised."

For the New England Farmer.

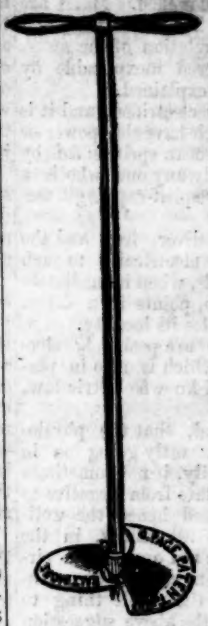
SOUTH DOWN SHEEP.

Mr. Editor:—I read last evening in the *Farmer* the discussion on sheep, and was somewhat interested. I keep South Downs, and like them much; they are quiet, thrifty and handsome, withal. I sold one of my neighbors 26, last fall, and a short time since I called to see them, and they had 48 as fine lambs as need be; one sheep had three, and all doing well. I sold the wether lambs from them last year at $4 per head, to the butcher—my neighbor will probably get more than that for them this year, (and there is no doubt at all but he can, if he chooses.) We will say that he get $200 for lambs, and allow say $40—a low figure—for wool, gives $240, a handsome return from only 26 sheep. The sheep were nearly all half blood, except three, perhaps, that were nearly full bred. I have a flock of full blood consisting of 30 that have now living, and about two months old, 48 lambs (if I count right) the same number as my neighbor gets from his 26 mixed breed. The mixed breeds seem as hardy, and about as productive, as the full bloods; perhaps they are more profitable for practical purposes, as they generally shear considerably heavier fleeces. I get more for my lambs when I sell them, on account of the breed. I sold all the bucks I had last year, at prices varying for 7 or 8 to 25 dollars, as for quality and size, and bought one of L. G. Morris for $50. I have this year a few nice lambs sired by an imported buck now owned by J. Thorne, of Duchess Co., that sold in England for $650; they are good lambs, but a stranger could not, I think, select them from among the others. T. B. Buffum.

Newport, R. I., 1854.

Lasting Effects of Heat.—The French, during the time their army remained under Bonaparte in the Holy Land, constructed two very large ovens in the castle of Tiberias. Two years had elapsed at the time of our arrival since they had set fire to their granary; and it was considered a miracle by the inhabitants of Tiberias, that the combustion was not extinguished. We visited the place, and perceived that whenever the ashes of the burned corn were stirred by thrusting a stick among them, sparks were even then glowing throughout the heap, and a piece of wood being left there became charred. The heat in those vaulted chambers where the corn had been destroyed was still very great.—*Clarke's Travel.*

THE POST AUGER.



Digging post holes with a common spade is a somewhat slow and fatiguing operation, and may be much facilitated with a good post auger, such as is represented above. This auger is used in a way similar to the common auger for boring timber, and with it post holes are readily made in sand, loam, clay or alluvial soils. We hope it may not be objected to because its construction is a little more scientific than the spade. The high price of labor urges *us*, at any rate, to avail ourselves of all the labor-saving implements tha we can.

For the New England Farmer.

WELL-DIGGING.

Bletonism. The faculty of perceiving and indicating subterranean springs and currents by sensation; so called from one Bleton, of France, who was supposed to possess this faculty. Vide Dr. Webster, *in loco*.

Bletonist. One who has the faculty of perceiving subterranean springs by sensation. Vide Dr. Worcester.

As acknowledged, there are more things in heaven and earth than our philosophy has hitherto dreamed of, the probable presumption arises that the idea involved in the above terms and definitions is not a mere chimera, but a fixed fact which may be rendered subservient to the general good.

Let certain persons take a "fork" of cherry, peach, hazel, willow, or the like, of one or two years growth, full of sap, and so hold the extremities, firmly grasped in the hands, that the fork will be upward; when they come into the vicinity of a spring of living water, the fork will bend toward it, and when the person stands immediately over the water, the rod will point directly downward.

In the hands of others, the fork, or a "divining rod" prepared for the purpose, will turn *from*, instead of *to* the water, yet will indicate its locality with nearly equal exactness.

A good Bletonist will also discover silver, iron and other ores by means of the rod, and persons often amuse each other by hiding a half-dollar in the ground, within a prescribed limit, and the diviner finding it with almost absolute certainty.

As intimated there are only certain persons, in whose hands the rod will work, and in some of these, not at all times; it therefore becomes an

important question, in whose hands will it work, and why not at all times?

Electrically, the race is classified. Males are positive; females negative. This is nature, and by this very general law of relation of the sexes, much, that is now considered inexplicable by many, may be satisfactorily explained.

Many males are negatively electrified, and it is found by experiment that such have this power or faculty of perceiving subterranean springs: &c., by sensation, and that generally any one who is a good biologic, mesmeric or "spirit-rapping" medium, is a good Bletonist.

Living (not deep) water, silver, iron and the like, being relatively *positive* electrically to such persons, the rod in their hands, when immediately over any of these substances, points in a direct line to it, and thereby indicates its locality.

In the hands of those who are positively electrified the rod is repelled; which is also in perfect accordance with the well-known electric law, that *likes* repel each other.

It has also been ascertained, that the physiological changes that are constantly going on in our bodies, change temporarily, if not sometimes permamently, their electric state from negative to positive and the opposite, and hence the well-known fact that, not at all times, in the same person's hands, will the rod operate; a circumstance which, probably, more than any other, has led more to believe the whole thing to be a humbug, but which, if the above suggestion has any weight, must obviously be expected to occur.

The rule by which the depth of water is ascertained, is to measure from the point where the rod *begins* to bend *toward*, to where it points directly to the water perpendicularly. This will give the depth, nearly, and it will be perceived that the sphere of attraction begins at about an angle of 45°. It seems hardly necessary to point out the value of this science to the agriculturist and others. By it much money and time may be saved, and land otherwise comparatively worthless, rendered immensely valuable. G.

Barton, Vt.

For the New England Farmer.

CANKER WORMS.

As a subscriber to your valued journal, from its early commencement until the present time, may I be permitted to avail myself of a small space in your columns, offering a few remarks in reference to that *pest* of the ruralist and the farmer, in the "Span or Canker Worm!" Another of their annual devastations has just been completed, and in many places the fair promises of spring have been wholly destroyed by their ravenous besiegings. Indeed, in some sections in our vicinity, they appear to have come forward in increased numbers, and, like

"Giants refreshed with wine,"

have carried perfected destruction wheresoever they have gathered and assailed. Many years since, I believe these depredators were not known among us. And although many able treatises have of late been written on the habits of this voracious insect, accompanied with cautions as to their increase; and although various plans have been suggested for their extirpation, yet, we believe nothing has as yet been effected, accomplishing fully the end desired. The process of tarring we believe has performed all it promised to, when faithfully continued. Yet, where there are many trees, this process is peculiarly laborious, and disagreeable. And accompanied as it is, with the *drying* rapidity of the tar, (although thinned with oil) and the injury it oft inflicts on trees, one would think it, by no means, the best resort that the ingenuity of man can reach to effect the object desired.

Girdles of oil cups, *tufts* of cotton and clipped straw, with various other imbecilities, have been used, and yet with no beneficial results, as the numberless burned orchards in our vicinity, bear ample testimony to.

At a period when societies are formed, to encourage the production of fruits and flowers—when premiums are liberally offered for the best exhibitions of *fruit*, *vegetable* or *grain*, and horticultural societies reward generously for the largest cherry or pumpkin—one would think a little of their munificent encouragement might, (profitably to mankind,) be diverted and appropriated to him who could rescue whole orchards from destruction; instead of showering all their encouragements on the one who could grow the biggest apple or tomato in the country.

But really Messrs. Editors,—seriously and religiously, I think the subject is worthy of, and demands better attention than has yet been given to it. For, of a truth, the evil by no means mitigates or diminishes; on the contrary, is most fearfully and disastrously increasing. Surely the subject calls for the keenest investigation, alike of the agriculturist, of agricultural societies, of the farmer, the chemist, the practical or even the unpractical man. For with the ravages of this insect still annually being spread over our beautiful orchards and groves, ought we to sit still, indifferent to the regular augmentation of this affliction, or at once endeavor to devise some means, if possible, to stay and extirpate it where it is? Recently we have had shown us a glass belt, (made in two segments, so as to encircle the tree, and thus arrest the rising of the insects,) invented and patented by Mr. A. EVERETT, of Roxbury, Mass., which we are told promises to be effectually useful. The inventor informed us awhile since, that its use had been adopted with great favor by Dr. THADDEUS WM. HARRIS, our distinguished Entomologist; and we should be glad to hear from our talented and indefatigable friend, the doctor, on this point, or any other that might profitably be availed of, as a curative for the increase and ravages of this devastating insect. Dr. HARRIS, in various articles contributed to your journal and other agricultural periodicals, as also in his able "Treatise on Insects," has given some valuable suggestions, as to the destruction of the "Canker Worm;" but yet none which we think wholly effectual, unless pursued at great cost of time and patience. And this, too, with little beneficial result, should one happen (as is oft the case) to have a "Lazy Bones" for his neighbor, who would quietly sit for a coat of *tar and feathers*, rather than bestir himself, with the "love of his neighbor as himself" in his heart, and lustily "*tar away;*" and thus remove a past pernicious example of laziness and indifference, for a goodly lesson of industry, and "of doing as one would be done unto."

Perhaps, Messrs. Editors, some of your numerous contributors or subscribers may afford beneficial and useful hints on this subject. For surely it cannot be that this marauding insect, the "Canker Worm," is indistructible; or that its annual return to us, blasting many of the best hopes of the farmer, is but the embodiment of that worm, which the scripture tells us "never dies."

Anxious to do all in my poor ability to effect this desired object, I would gladly be willing to associate myself with any ten or twenty persons, and offer a premium, not less than 500 dollars, to see if something cannot be effected, to overcome effectually this continued and increasing devastation and evil. Will the agricultural or horticultural societies join hand?

Your friend and admirer,

ROXBURY RUSSET.

HIGH PRICES---EMIGRATION---SUGAR.

We copy below from the *United States Economist*, a valuable commercial journal published and conducted by THOMAS P. KETTELL, at New York. We give the whole article on the subject of Sugar, that the reader may get an idea of the amount imported, and that which is made from beets. Something of the cost of producing sugar on the plantations may be gathered from the letter dated at New Orleans.

Since 1847 the number of immigrants that have arrived has reached 1,750,000 souls, a number more than the whole population of the Kingdom of Hanover, which has an area of 14,276 square miles, and which exports $5,000,000 per annum, and which is taxed $6,500,000 per annum. Since the year 1847 a population equal to the whole of that Kingdom, has, with its capital, skill and industry, been poured upon the cities and plains of the United States at a moment when California was sending hither fifty millions of gold per annum, stimulating the production of railroads, and every species of manufacture, giving full employment. It is not to be wondered at that such a host of persons rushing into the United States, seizing upon and vivifying every branch of industry, should not only have caused a production of commodities but have consumed a large supply. The high prices of produce in the past four years have requited labor and encouraged enterprise, and the short European crops of the present year have served to send the current of labor into agricultural employments, hence the rising value of Western lands. Immense tracts like those penetrated by the Illinois Central Railroad, are in larger demand, and with the prospect of prolonged political difficulties in Europe, the intrinsic value of the lands is more than doubled. Land which raised 60 bushels sod corn at 15 cents per bushel, yielded $9 per acre and paid for the labor. The same labor now realizes, by the advance in corn to 40 cents, $24 per acre. The external manifestation of the national prosperity is in the exports from New York, to which point the surplus foreign produce tends; and we find that this value is now far in advance of the famine year for produce, irrespective of specie.

It follows that not only the wants of immigrants who create a demand for goods in the double ratio of greater numbers and improving wealth, must be met, but also those of inhabitants generally. Thus, in 1847, the population of the United States was 20,650,000, it is now 25,000,000, according to the estimates of *natural* increase; if to this is added 1,500,000 immigrants, the number is 26,500,000 in the Union. If the consumption of goods in 1847 was $20 per head per annum, and is now $30 per head per annum, the result would be as follows:

	Population.	Cons'ption per head.	Value.
1847	20,650,000	$20	$413,000,000
1854	26,500,000	30	779,500,000
Increased	5,850,000	$10	$366,500,000

The receipts of gold from California have declined to some extent by reason of the enormous losses that have been sustained on goods sent thither last year. As compared with other articles, however, gold now commands the highest price. It has risen within the year more than any other article, since it will command at its place of production, more of other products of industry, than it would at any one time since the discovery of the mines. Goods and produce are lower there than at New York, and as the facilities for gold digging and washing are greater, without any apparent diminution in the yield of the mines, the same amount of labor will give a greater quantity of gold, and that gold will command more commodities. These are elements which promise for the close of the fiscal year 1855 a state of affairs the reverse of that which is now experienced.

SUGAR.

The sugar trade of the world has received in the last ten or fifteen years, a great impulse through the changed commercial policies of our own and other governments. The improved prosperity of the people of England and Europe, as well as of the United States, leading to larger consumption, on the one hand, while the development of the culture of the cane in Louisiana, and the beet sugar in Europe, has tended to enhance the general supply, which again has been checked by the course of the British and French governments in respect to their sugar colonies. The great reduction of the sugar duties of Great Britain has had the effect of increasing the consumption of raw sugar in the British Islands, 50 per cent. The duty on foreign brown sugar in England, which was 66s. per cwt., prior to July, 1846, has been 14s. since July, 1851, and in this year 1854 the duties on raw and refined will be equalized. Before the removal of the prohibitive duty of 66s. in Great Britain, Cuba, in bond, was 19s. 6d. per cwt.; it is now 25s. 6d., the immense consumption raising the price to the producer. The consumption in Great Britain has steadily increased as follows:

	Colonial. Cwt.	Foreign. Cwt.	Total. Cwt.	Duties. £
1842	4,325,785	2,189	4,327,974	5,485,413
1853	6,159,267	1,033,095	7,552,362	4,081,270

The reduction in price and duty is equal to $50,000,000 per annum to the sugar consumers, while the enhanced remuneration to the growers is manifest in the increased supply. While the British demand for sugar was thus enhanced, the colonies produced less, and the extra demand from England fell on the markets of the world. In the same period, although the aggregate consumption of sugar on the continent increased, the demand for cane sugar was checked by the extended pro-

duction of beet root sugar, which has reached 150,000 tons per annum. Of this, in the German Customs Union the increase has been from 15,000 to 62,000 tons, forming now one-half of the whole consumption of sugar in the Zollverein. In France a great increase in the production of beet sugar took place under the protective policy of the government, which discriminated in its favor against the cane sugar of the colonies, until the growth became large, and then it reversed its policy, discriminating in favor of cane sugar. Nevertheless, the course of the Provisional government in 1848, towards its colonies, diminished the receipt of colonial cane sugar in France from 120,000 to 60,000 tons. In the United States, the duty up to 1857 was 2¼ per cent. per lb. Since then, at 30 per cent. it has averaged about 1 cent per lb., and yields a revenue of $4,500,000 per annum. Since 1842 the increase in production and importation has been steady as follows:

IMPORT OF SUGAR AND CROP OF LOUISIANA.

	Imports. lbs. White.	Imports. lbs. Brown.	Total. lbs.	New Orleans. crop. lbs.
1843	1,098,025	69,534,331	71,632,356	140,000,000
1853	1,000,000	506,000,000	501,000,000	321,934,000

There were in operation in Louisiana in the year 1853, 1,481 sugar estates; of which there were worked by steam 943, and by horse power 538. Using the old process by open kettles, 1,428; using the vacuo process, 53. The total value produced was $126,929,000, more than equal to this year's cotton crop.

The increase in foreign supply is 430,000,000 lbs., and in domestic 182,000,000 lbs. The latter finds an increasing and rapid sale up the Mississippi valley and through the West, some of it coming to New York through canals and lakes. Of the imported sugar, by far the largest proportion is from Cuba, and more than one-half is refined in New York, in 17 establishments which employ 4,500 men on a capital of $10,000,000, and produce $20,000,000 worth of refined sugar per annum. It is undoubtedly the case that the use of refined sugar is becoming more general. The refiners, whose business up to 1842 was protected by allowing them a drawback on the refined sugar exported, and which drawback gradually became greater than the duty on the raw sugar, now, in common with all other sugar consumers, demand a repeal of the sugar duty.

Under the supposition that the present duty is an advantage to sugar growers, equal to the amount paid, (1 cent. per lb.,) then the amount paid by all the sugar consumers in the country is $8,200,000 per annum, of which the government gets $4,500,000 and the sugar planters $3,700,000, which would be about $2,500 to each estate. The sugar planters deny, however, that they make any profit, as follows:

New Orleans, May 9th.

Messrs. Editors—My attention was drawn to the enclosed article in your valuable paper, and I propose to give you my own experience as a sugar planter in a few words, and as the last season was one of unusual production, and my crop larger than usual, I think it is not an unfair selection; and as it is not in my way to inquire into my neighbors' affairs, I cannot pretend to give you *their experience*, still I venture the assurance that very few realize eight per cent. per annum, and many of them are making, in my opinion, more leeway than headway.

My plantation, with 100 negroes, cost me		$100,000 00
I made 500 hhds. sugar of fair quality, sold at 3½ cts.		16,250 00
25,000 gallons molasses, 14 cent		3,500 00
		$19,750 00
Paid the merchant's commissions on sale of the crop, 2½ per cent., is	$443 75	
Freight to the city of N. Orleans, $1,12½ ₩ hhd.	750 00	
Freight on 700 bbls. Molasses, 75 cts. ₩ bbl.	525 00	
Overseer's wages	1,200 00	
Sugar maker	300 00	
Engineer to superintend my own engineers	250 00	
120 bbls. Mess Pork, at $14	1,680 00	
Paid for 700 Molasses bbls., at $1,50	1,050 00	
Paid for assistant Cooper to make 500 sugar hhds. 62½	312 00	
One suit of Jeans and Lindseys for the Negroes, at $3	300 00	
Two suits of Summer wear, $1,50	300 00	
Shoes for the workers, say two pairs for 70 persons	157 00	
Purchase of 6 mules to replace others	840 00	
Taxes	342 00	
600 bbls. Corn, at 65 cents	520 00	
Physician's bill for the year	250 00	
Paid for Plows, Carts, &c	295 00	
Repairs of Engine, resetting Kettles, Furnaces, &c	500 00	
Iron, Salt, Hay, &c	225 00	$10,300 75
Deducted from sale of crop, leaving		$9,449 25

Being less than 6 per cent. interest on the investment. In these expenses I do not include my family or house expenses, nor do I take into consideration the loss of some valuable hands—placing the births against the deaths.

The very great increase in the production of sugar affords evidence of far better general results than are here represented, and it is to be remarked that the crop has increased threefold since the duty was reduced from 2½ to 1 cent.

Ladies' Department.

ERRORS IN BREAD-MAKING.

SOFT BREAD.

"What is the reason," I am asked, "that soft bread is so much used?" Many ignorant persons prefer it; it can be swallowed without much mastication, and the labor of kneading is much abridged. Bread, to be good, requires much kneading, and baking until the crust is well-browned.

MEDICAL TESTIMONY.

Medical men have had their attention drawn to this subject, (the use of alkalies in bread-making,) and many efforts have been made to discover antidotes, and to prevent the ill effects of alkaline compounds; and although medical men disagree on many points that come within their province, yet on this point they are nearly unanimous as to the cause, the effect, and the remedy. Some of the effects of the long-continued use of alkaline compounds, are, difficulty of breathing after motion, weariness, heaviness, gums apt to bleed on the slightest touch, fetid breath; and "dissections of such cases have always shown the blood in a very dissolved state." The remedy is abstinence from alkaline compounds, with a diet of fresh vegetable or wholesome farinacea.

INDIAN CORN,

Is a noble grain, a rich boon, nicely covered up and presented to the human family in a clean condition; no grain more so. The meal of this grain, so far as I have observed, is ground too fine, so that when it is cooked it has a pasty consistence. Corn ought to be always coarsely ground. It is naturally more friable than wheat,

and in this respect it has the advantage over wheat. This friability is a valuable mechanical property, and should never be injured by grinding or cooking. A good mechanical condition is an indispensable requisite to easy digestion; therefore, friability ought to be stamped on every dish, and marked on every loaf and cake. All doughy, glutinous and pasty bread and puddings should be avoided; they do not become the tables of an intelligent and cultivated people; the time and fuel expended in preparing doughy bread, and pasty puddings, is worse than a dead loss.

MILK IN BREAD.

I have more objections than one to milk in bread, but the most serious is, that persons of advanced age, who are in the daily use of milk-made bread, will be exposed to suffer from an over supply of osseous or bony matter, and particularly so if their kidneys be affected. Bread should always be made with water, and when so made, it is suitable for the aged and the young, the sick and the well. And as for sour milk, a microscopic view would, I presume, present additional arguments against its use.—*Water-Cure Journal.*

TO CRYSTALIZE FLOWERS.

The experiment is simple and can be tried without difficulty. Dissolve eighteen ounces of pure alum in a quart of soft spring water, (observing proportion for a greater or less quantity), by boiling it gently in a close tinned vessel, over a moderate fire, keeping it stirred with a wooden spatula, until the solution is complete. When the liquor is *almost* cold, suspend the subject to be crystalized, by means of a small thread or twine, from a lath or small stick laid horizontally across the aperture of a deep glass or earthern jar as being best adapted for the purpose, into which the solution must be poured. The respective articles should remain in the solution twenty-four hours; when they are taken out, they are to be carefully suspended in the shade until perfectly dry. When the subjects to be crystalized are put into the solution while it is quite cold, the crystals are apt to be formed too large; on the other hand, should it be too hot, the crystals will be small in proportion. The best temperature is about 96 deg. of Fahrenheit's thermometer. Among vegetable specimens that may be operated on are the moss rose of the gardens, ears of corn, especially millet-seed, and the bearded wheat, berries of the holly, fruit of the slow-bush, the hyacinth, pink, furze-blossoms, ranunculus, garden daisy, and a great variety of others; in fact, there are few subjects in the vegetable world that are not eligible to this mode of preservation. The fitness of the solution for the purpose may be ascertained by putting a drop of it on a slip of grass, and seeing if it crystalizes as it cools, if so, the solution is sufficiently strong. Then twist around a sprig of plant, a cinder, or wire ornament of any kind, some cotton, or still better, some worsted. After being immersed as already directed, the surface of the whole will be found covered with beautiful crystalizations.

AN OLD SAYING.—An old writer says that when cannons were introduced as negotiators, the canons of the church were useless—that the world was governed first by *mitrum* and then by *nitrum*—first by St. Peter and then by Salt Petre.

THE BOSTON AND WORCESTER

EAGLE DOUBLE PLOWS.

THE superior merits of these Plows consist in

1. The mode of attaching the forward mould-board to the beam, by which great strength and durability are secured, as also the various desirable changes in debt of work and relative depth of each plow, the same being regulated to any shade of nicety, with perfect facility:

2. The entire and handsome overturning of the sod furrow, by the forward mould-board, to the extent of the whole width of furrow taken by the plow, placing it beneath, out of the way of the teeth of the harrow, cultivator, or other implement, so that it is in no case dragged to the surface in the after cultivation of the crop:

3. The thorough and finished work done by the rear mould-board, in taking up its furrow of under soil and sifting or scattering it over the inverted sod, so as to entirely fill to the surface, and at the same time break open any undue cohesion of the soil, leaving the plowed land in a perfectly pulverized condition, requiring little labor with the harrow or other surface-working instrument,—and indeed, in all tolerably free loams, rendering the use of these instruments, as pulverizers, quite unnecessary:

4. The remarkably light draught of the plow, in proportion to the amount of work and the thoroughness of pulverization accomplished.

Several sizes of the BOSTON AND WORCESTER EAGLE DOUBLE PLOW, are made by the subscribers, from patterns of their own original invention. They invite their friends and customers to examine these Plows, as to quality and durability of material, thoroughness and finish of construction, and to test their working properties.

Manufactory at Worcester, and Warehouse, Quincy Hall, over the Market, Boston.

RUGGLES, NOURSE, MASON & CO.

April 30, 1853.

Fertilizers.

BEST PERUVIAN GUANO.
Super-Phosphate of Lime.—"DeBurg's No. 1."
Poudrette, of the best quality.
Ground Plaster, suitable for agricultural purposes.
Ground Bone, Bone Dust and Burnt Bone.
Also, Grass Seeds of reliable quality at the lowest market price.

GEO. DAVENPORT,
5 Commercial, corner of Chatham Street, Boston.

Feb. 18, 1854. tf

Ground Plaster,

FOR SALE, at White's Mills, HAVERHILL, Mass. Apply to JAMES D. WHITE.

Every Farmer who desires to renovate poor pastures, improve his mowing, increase and improve his crops of corn and potatoes, should give this article a full trial; it is a great addition to any compost heap.

Fine clover usually follows the sowing of plaster.

Jan. 28, 1854. tf.

Cranberry Plants.

BELL, or Egg shaped Variety—commonly raised in New England, and no doubt is the best variety for cultivation—they are hardy and prolific—sometimes produce over 250 bushels ✱ acre, after 2 years, and needs but little cultivation. Circulars relating to culture and price will be forwarded to applicants.

F. TROWBRIDGE,
New Haven, Conn

Feb. 18, 1854. tf

Improved Church Vanes,

ALL COPPER,

MANUFACTURED BY

MESSRS. J. & C. HOWARD,

WEST BRIDGEWATER, MASS.,

MAY be purchased at the Quincy Hall Agricultural Warehouse South Market Street, Boston.

July 1, 1854. tf

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PATENT GRIST MILL

Received the highest premium at the World's Fair; and more than two hundred and fifty of them have been sold within two years. The stones are French Burr; the frames and hoppers, cast iron; and the spindles, cast steel. They will work both for flouring and on all kinds of grain, and will keep in repair longer than any other mill. Having just completed my new buildings, for manufacturing and running them, I am now prepared to supply all orders for all the sizes, from twenty inches to four feet diameter, including a superior farm and plantation mill, which will grind corn in the best manner, by horse power, or even by hand. Public attention is invited to this small mill in particular. Descriptive circulars, with cuts, sent to post-paid applications.

EDWARD HARRISON,
Sole manufacturer, and proprietor of the Patent.
New Haven, Ct

April 29, 1854. 6mV

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KEPT ON STRICTLY TEMPERANCE PRINCIPLES,

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Nov. 1 1y

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GEO. DAVENPORT,
Agent for the manufacturer, 5 Commercial, corner of Chatham Street, Boston.
Feb. 18, 1854. tf

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Suffolks from Morton's Piggery, have taken the highest premiums, as may be seen by the published transactions of the Massachusetts State and Norfolk County Agricultural Societies. The stock now for sale is large and well assorted, embracing the purest and best blood of this unequalled breed. Pigs, properly paired for breeding, $30 a pair. For prices of Boars and Sows, see catalogue, which will be sent by mail on application. Animals purchased forwarded by Express or vessel from Boston, with pedigree. Orders must be accompanied by a remittance.

JAMES MORTON, West Needham, or
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June 10, 1853. 4wV

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Situated in HOLLISTON, one mile from the depot, on the Milford Branch Railroad, and centre of the town; on the main road from Holliston to Hopkinton, and near a school. Said farm contains eleven acres of excellent land, and is well supplied with Apple, Pear, Peach, Cherry and Plum trees, in bearing order; also Currants, &c. Two excellent wells of water. The buildings consist of a good two-story House, 29x40 with an L, wood-house, Shoe-maker's shop and a barn 34x41 and cellar under the same, in good repair.

For particulars inquire of ADDISON WARFIELD, on the premises.
July 1, 1854.